DOCUMENT RESUME

ED 329 060 EC 300 054

AUTHOR	Morriss, Richard
TITLE	Attention Disorders in School Age Children: The Role of the School Psychologist in Diagnosis and Treatment.
PUB DATE	90
NOTE	184p.; For a related document, see EC 300 055.
AVAILABLE FROM	Richard Morriss/Village Press, P.O. Box 2496, Carmel Valley, CA 93924.
PUB TYPE	Guides - Non-Classroom Use (055)
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	*Attention Deficit Disorders; Behavior Change; Beliefs; Counseling; Educational Diagnosis; Elementary Secondary Education; Etiology; Evaluation Methods; *Intervention; Nutrition; Parent Education; Psychometrics; *School Psychologists; Special Education; Student Evaluation

ABSTRACT

Intended for school psychologists, the handbook stresses that attention deficit disorder (ADD) is primarily a school problem and proposes that the school psychologist is the best professional to accurately diagnose and treat this disorder. The book reviews current research related to school psychology, describes assessment tools, and explains a variety of treatments. The first chapter looks at the role of the school psychologist in the diagnosis and treatment of ADD covering such areas as definition, developmental course of ADD, etiology, diagnosis, treatment, medication, and epidemiology. The second chapter considers the role of the school psychologist in diagnosis noting the use of the following diagnostic tools: health and developmental history; school records; classroom observations; observations in testing; psychometric data; behavior rating scales; and behavioral intervention effects. The psychoeducational report is discussed in the third chapter which identifies the diagnostic questions of ADD that need to be answered and documented and describes the Monterey Model of Assessment. The fourth chapter explains seven types of treatment: generic classroom strategies; diet management; parent training; behavior management; counseling; medication; and special education. The last chapter identifies maxims and beliefs for the school psychologist regarding ADD. The appendix presents 27 various forms, questionnaires, and summary sheets. A bibliography of 113 items is included. (DB)

****
*   Reproductions supplied by EDRS are the best that can be made   *
*   from the original document.   *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

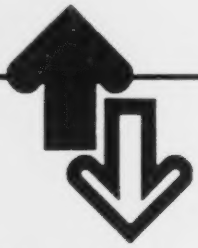
☑ This document has been reproduced as received from the person or organization originating it

☐ Minor changes have been made to improve reproduction quality

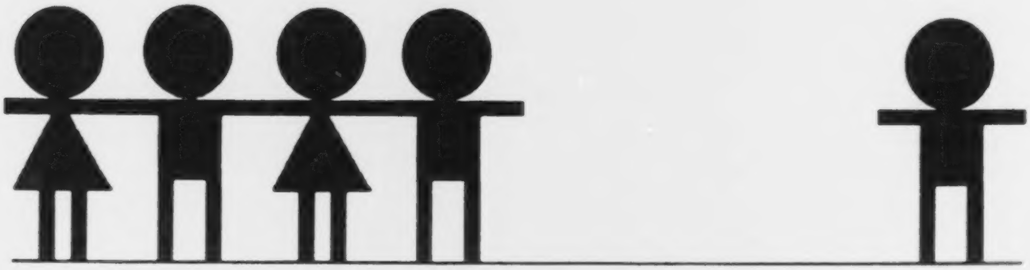
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

ED329060

Attention Disorders In School Age Children



The Role of the School Psychologist in Diagnosis and Treatment



Richard Morriss, Ph. D.
School Psychologist

Forward by Thomas Burchard, M.D.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Richard
Morriss
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

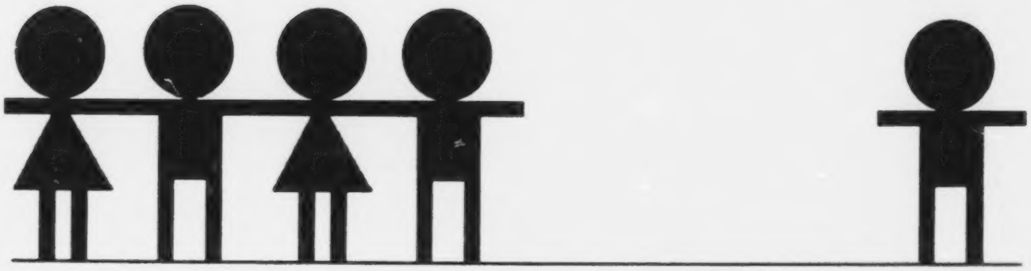
copyright, 1990

BEST COPY AVAILABLE

EC 300054

Attention Disorders In School Age Children

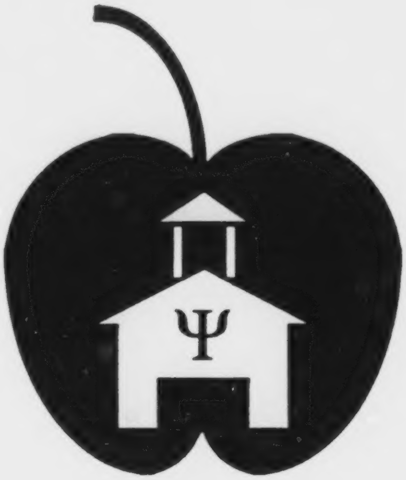
The Role of the School Psychologist in Diagnosis and Treatment



Richard Morriss, Ph. D.
School Psychologist

Forward by Thomas Burchard, M.D.

copyright, 1990



Attention Disorders in School Age Children The Role of the School Psychologist in Diagnosis and Treatment. Copyright ©1990 by Richard P. Morriss, Ph. D. All rights reserved. No part of this book may be used or reproduced in any manner without the consent of the author. Parents should consult with their physician regarding specific medical treatment for their child. For information on ordering, write to: Richard Morriss/Village Press, P.O. Box 2496, Carmel Valley, CA 93924.

FOREWORD

Child psychiatry is in the process of a revolutionary change. With the publication in 1980 of the Diagnostic and Statistical Manual (DSM III) by the American Psychiatric Association, operational criteria were specified for the first time in an official psychiatric diagnostic nomenclature. One particular case in point was the shift from the Hyperkinetic Reaction of Childhood (DSM II) to a more specific focus on what was felt to be the primary symptoms of Attention Deficit Disorder (ADD). Accompanying this shift in focus was the addition of inclusionary and exclusionary criteria which helped provide more specific and homogeneous groups of children. This has encouraged a burst of research and has led to a better understanding of this disorder and its treatment.

Hyperactive, or Attention Deficit Hyperactive Disordered (ADHD) children, have been treated with stimulant medication often with dramatic results since 1937. It had been assumed that the response had been "paradoxical" in nature. As researchers shifted their focus it became more obvious that a large number of children who had previously been diagnosed as being hyperactive in fact had noticeable improvement in attention deficits when treated with stimulants. Likewise, many children with attention disorders that did not display hyperactivity also were found to improve markedly. Yet, perhaps the most important finding by Cantwell and Satterfield was that a number of treatment strategies in combination with or without medication in a multi-modal and individualized treatment approach tended to result in the best long term outcome.

Dr. Morriss has added a significant book to the volume of literature available for the diagnosis and treatment of children with attentional disorders. His focus is to assist the school psychologist into becoming the coordinator for the treatment process. An appealing aspect of this book is its practicality. It is a "nuts and bolts guide" for school psychologists, or for that matter any clinician, parent, or graduate student in training.

Only a few books that address this topic (with the exception of Dr. Barkely's, *Hyperactive Children*) is so broad in its multi-modal coverage and specific in providing such precise and comprehensive information. I wish it had been available when I began my training.

Thomas K. Burchard, M.D.
ABPN Certified Child Psychiatrist
Director of Child and Family Problems
Community Hospital of the Monterey Peninsula
Mental Health Center
Monterey, CA
3/18/90

PREFACE

School Psychologists in Bondage was proposed as a title for this book–not very accurate, but a lot more catchy than the one selected. Somehow my wife convinced me that my original title lacked taste; I think that "tacky and stupid" were her exact words. Anyway, I really do not intend to create any controversy, although some would say that you cannot avoid it if you are going to write about ADD.

The primary reason for writing a preface is that it gives an author a chance to explain their own beliefs and biases and it gives the reader a chance to understand the genesis of those biases. If you don't care "where I am coming from" (that's from the 60s), then, skip the Preface and go right to Chapter One.

I believe that the topic of Attention Deficit Disorder should be an area of expertise for every school psychologist. ADD is not just a medical or psychiatric problem; ADD is primarily a school problem. ADD can seriously affect learning, social behavior and work habits.

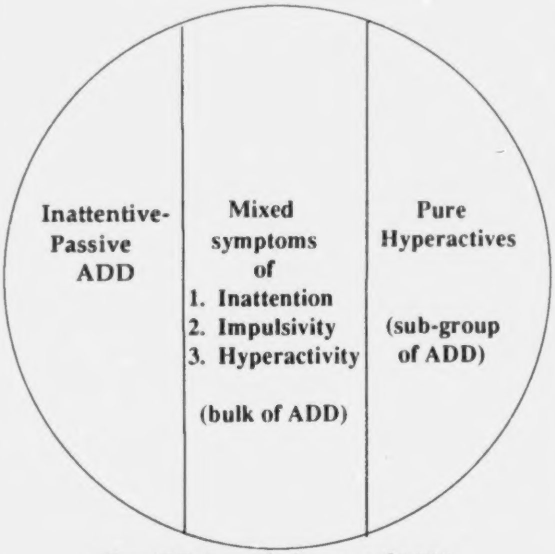
I have been a school psychologist for over 20 years, but I have only recently become interested in the subject of ADD; that's because this label has only been recognized since 1980. As a school psychologist during the late 1960s and throughout the 70s, I was involved with children who had behavior and/or learning problems in the school setting. Occasionally, I would evaluate a "Hyperactive" student. This was the label used at the time (60s and 70s) to describe an observable group of kids that couldn't sit still; they were restless, squirmy and displayed all sorts of "excessive motor activity"; these children often had learning problems, motor problems and fine motor incoordination. These kids were pure hyperactives. Although it was rare to find such a child undiagnosed in a regular second or third grade, I did find them; this fact perplexed and amazed me.

It was exciting to find an undiagnosed hyperactive child because I knew what the cure was—medication. I had seen other children who carried the diagnosis of Hyperactivity and these kids often responded "miraculously" to a stimulant drug called Ritalin. It was a quick fix, and I was an instant hero (or thought I was) when the child responded to the medication as predicted. Sometimes the drug alone seemed to be the answer to the problem, although these students frequently had learning disabilities and needed special education placement. Special education programs often used behavioral strategies to help motivate these frustrated, hyperactive, learning-disabled students.

Even during the times when medication was a popular treatment for Hyperactivity, it was occasionally a frustrating experience trying to convince a pediatrician that a certain child was "really" hyperactive. These children did not always behave the same way in the doctor's office like they did in the classroom, playground, or even in testing with the school psychologist (i.e., have you ever had a child climb upon the table while you were testing him? Or, have you ever had a kid grab test materials right out of your hand?) I wasn't always successful in getting a hyperactive student put on medication because the pediatrician involved with the child did not trust my diagnosis; he probably didn't think I knew what I was talking about and in retrospect, he may have been at least partially correct. I was unaware (i.e., ignorant) of other treatments for hyperactive children which included counseling and parent training in behavior management. Also, it was during the 70s that Feingold came out with his claims regarding the causative effects of food additives. Until finally discredited, parents often opted for diet management over medication as a means of controlling hyperactive children. Nevertheless, during the 70s, medication was "disfavored" as a treatment for hyperactivity. Behavior management (modification) and diet management were the popular modes of treatment in the 70s.

Other than the very infrequent (about once a year) thrill of actually diagnosing a hyperactive child and seeing the "miraculous" response to Ritalin, I really didn't get too excited about this particular childhood condition called Hyperkinesis. As a school psychologist who did psychometric assessment, a learning disabled child was a lot more interesting, and more frequently, the type of disorder that I was asked to evaluate. Anyway, these hyperactive kids were a pain in the butt because they were the ones who really seemed to do all the testing in the testing situation. Testing my patience was their favorite!

The picture of Hyperactivity changed significantly in 1980 when volume three of the Diagnostic and Statistical Manual of the APA came up with the new label of Attention Deficit Disorder (ADD). The new concept associated with the old label of Hyperactivity was that a child could be hyperactive as part of ADD, but s/he didn't have to be. We were now talking about a larger group of children in the schools who demonstrated prominent problems of inattention and distractability sometimes connected to other symptoms of impulsivity and hyperactivity. The picture now included hyperactive children as a subgroup of the ADD population as illustrated below.



The ADD Population as of 1980

Before 1980, psychologists, psychiatrists and pediatricians were focused primarily on the sub-groups of pure hyperactives and these were the kids that were put on medication almost automatically. An interesting new concept also came out of the new ADD definition–"ADD without hyperactivity". In fact, this sub-group of non-hyperactive ADD children, except for their attention problems could be considered the antithesis of the Hyperactive child with symptoms of inattentive-passive behavior. Surprisingly, these non-hyperactive ADD children responded to the same treatment approaches, including medication, as did their hyperactive counterparts.

The new clinical label of ADD probably wouldn't have been so significant to me as a school psychologist if it hadn't been for the influence of Tom Burchard. Dr. Burchard is a child psychiatrist, who has been Director of Child and Family Guidance Services at Community Hospital of the Monterey Peninsula since 1979. Dr. Burchard, whom I considered an expert in ADD, was fresh out of UCLA medical school. He conferred with me about some of the children I had assessed who were also being seen by him. Some of these students were inatttentive and non-hyperactive. Dr. Burchard often asked for information about certain children; this information was easy for me to access, but not for him. (e.g., observation of school behavior, test profile, behavior rating scales, academic achievement, school history, etc.). Dr. Burchard used this information as part of his diagnosis, as well as for evaluating treatment effects (medication). The children we conferred about most frequently were representative of this new type of non-hyperactive ADD who had problems with inattention, distractability, and sometimes impulse control and who may have been only mildly hyperactive. These children had problems mainly at school that took the form of learning disabilities, behavior problems, social problems, and/or work habit problems, which in general, included practically every child that we evaluated. We knew that every child we evaluated did not have an attention disorder. How can we correctly label these children?

Until this time (1980), the obvious symptoms of hyperactivity had greatly aided in the process of differentiating this condition from the "normal" population. The ADD label brought with it the potential for almost every child referred for psychological assessment to be so labeled. Whereas, the true non-hyperactive ADD child had actually been undiagnosed until this time, we now had the equally undesirable situation for mis-diagnosis and over-diagnosis of this ADD condition. What a predicament! How can a non-hyperactive ADD student be differentiated from other kids who have work habit problems: Off-task, trouble completing work, disorganized, distractable, appear bored and/or unmotivated. You know, this sounds kind of normal for kids; nevertheless, I believe that this is a job for a school psychologist.

In my attempt to learn how to accurately diagnose the non-hyperactiveor mildly hyperactive ADD child, I made a profound discovery. As a school psychologist, I had better tools and a better opportunity to be more accurate in determining the student who actually had ADD from those who only appeared to have it.

The diagnostic tools that I propose we use to rule out ADD in any student we assess are the tools that most school psychologists use all the time, including the following:

- health and developmental history
- classroom observation
- psychometric data
- test observation
- behavior rating scales
- school history information
- results of specific interventions (incentives)

It is simply a matter of looking at the diagnostic information from the above sources in a systematic way to determine if a particular student actually has or might have this disorder.

My passion for the subject has grown out of the realization that as a school psychologist, I have at my disposal all the information I need to make a fairly accurate diagnosis of ADD (i.e., better than a clinician can and far better than a pediatrician can). I can coordinate the diagnostic process from the school setting which directly leads to the role as coordinator of the treatment process from the school setting. The school setting is the best place to diagnose and treat the ADD student because this is the setting where s/he must learn to adapt and it is unfortunate for the ADD student that the symptoms of their condition often leads to very maladaptive and problematic behavior in the school setting. This condition also may lead to profound failure in school.

The information in this book is a compilation of my philosophy in the diagnosis and treatment of ADD students based upon an assimilation of experience, training and extensive research from the viewpoint of a school psychologist. This text is meant to be a "nuts and bolts" guide for school psychologists to deal with ADD student, their parents, teachers and doctor.

The ideas in this book do not represent a radical viewpoint nor a controversial philosophy. Probably to the contrary, my approach to both diagnosis and treatment is fairly conservative. This book is based upon the premise that a school psychologist should be the expert on ADD because quite often it is within his/her role to evaluate student learning and behavior in the school setting where the symptoms of ADD are usually most pronounced. I believe that the diagnostic process which I advocate is sound practice. In the process of writing this book, I have learned a great deal about ADD treatment. My hope is that treatment possibilities can be truly useful to a school psychologist through the applications process within the school setting.

Richard Morriss, Ph.D.
School Psychologist

Contents

List of Figures

Foreword

Preface

Page

1. The Role of the School Psychologist in the Diagnosis and Treatment of ADD

- Introduction 1
- Definition 1
- Clinical Categories 2
- School Related ADD Catergories 4
- Developmental Course of the ADD Child 6
- Etiology 7
- Organic Causes of ADD 8
- Causes of Pseudo ADD 9
- Causes Related to Prenatal Drug Exposure 10
- A Brief, Imprecise History of ADD 11
- Diagnosis 13
- Treatment 13
- Medication 14
- Epidemiology of ADD 15
- ADD Problems and the Role of the School Psychologist 17
- Attention!!! 18

2. DIAGNOSIS: The Role of the School Psychologist

- Introduction 19
- Diagnosis: Clinical vs. Educational 19
- The Role of the School Psychologist 20
- The Diagnostic Tools of the School Psychologist 22
    1. Health and developmental history 23
    2. School records 26
    3. Classroom observations 26
    4. Observations in testing 27
    5. Psychometric data 30
    6. Behavior rating scales 33
    7. Behavioral intervention effect 37
- Assessment of Attention Disorders 40
- Diagnosis of ADD: concluding remarks 40

Page

3. The Psychoeducational Report: The Role of the School Psychologist

- Introduction 42
- The diagnostic questions of ADD that need to be answered and documented 42
- The Monterey Model of Assessment 43
- Essential element of the psychoed report 44
- Example report 46

4. TREATMENT: The Role of the School Psychologist

- Introduction 47
- Generic Classroom Strategies 50
- Diet Management 53
- Parent Training 58
- Behavior Management 69
- Counseling 81
- Medication 90
- Special Education 105
- Treatment of ADD: concluding remarks 110

5. Maxims for the School Psychologist Regarding ADD

- Introduction 113
- The Ten Maxims 113
- Maxims or Beliefs 116

Appendix 118

Bibliography 152

List of Figures

Page

Figure 1 DSM Symptoms of ADD (1980) 2

2 Four types of ADD found in the school setting 5

3 The Four Types of ADD: Diagnosis 20

4 School Problems: Diagnosis in School Psychology 21

5 Example form added to a health history 25

6 The Attention sub-scale from the ADD-H Comprehensive Teacher Rating Scale (ACTeRS) 35

7 The Monterey Questionnaire 37

8 Classroom test of students' response to incentives 39

9 MADAM 43

10 Example psychoeducational report 46

11 The two week high protein breakfast trial 57

12 Medications used for attention disorders 92

13 Medication: Factors to consider 99

14 Treatment combinations 111

The Role of the School Psychologist in the Diagnosis and Treatment of ADD

Introduction

The school psychologist has a very unique role in both the diagnostic and the treatment process of the child with an Attention Deficit Disorder (from here on referred to as ADD). It is the intent of the author to delineate a method for any practicing school psychologist, who acts as a diagnostician, to accurately diagnose ADD and to be familiar with treatment approaches that are appropriate, practical and effective. As a school psychologist, you should also be aware of treatment approaches that are not appropriate, practical and effective.

School Psychologists who conduct psycho-educational assessment are in the best of all possible positions to properly diagnose ADD as it impacts learning and behavior in the school setting. As a school psychologist, you already have most of the skills and tools needed for accurate diagnosis of ADD; and with the added information in this manual, you will become an expert in the diagnosis and treatment of ADD. You will not just be a self-proclaimed expert, but an expert in the opinion of other professionals, including the medical community.

The term, attention disorder or ADD, will be used throughout this handbook instead of the current ADHD designation. ADD, as described in DSM III, is the best label to represent the group of symptoms attributed to the type of student who has all sorts of problems (mild to severe) within the school setting that affects learning and behavior.

Definition

Attention Deficit Disorder (ADD) is an early childhood condition which is characterized by significant pervasive primary symptoms including:

1. Inattention/Distractibility
2. Impulsivity
3. Hyperactivity

ADD is a chronic disorder which can begin in infancy (or even in utero) and can extend through adulthood while having negative effects on a child's life at home, school, and within his/her community. It is conservatively estimated that 3-5% of our school age population is affected by ADD, a condition which previously fell under the heading of "learning disabled" "brain damaged", "hyperkinetic", or "hyperactive". However, the newer term, attention deficit disorder, was introduced to more clearly describe the characteristics of these children because they have particular problems with normal selective attention which permits appropriate stimulus selection and defense against distractions. These children cannot seem to tune out or filter out irrelevant stimuli around them. Selective attention is a normal function that works in concert with other cognitive processes such as memory and language processing to permit classroom learning and successful social interaction.

Clinical Categories

As described in DSM III, the child displays, for his or her mental and chronological age, signs of developmentally inappropriate inattention, impulsiveness, and hyperactivity. The signs must be reported by adults in the child's environment, such as parents and teachers. ***Because the symptoms are typically variable, they may not be observed by the clinician or physician.*** When the reports of teachers and parents conflict, primary consideration should be given to the teacher reports because of greater familiarity with age-appropriate norms. Symptoms typically worsen in situations that require self-application, as in the classroom. Signs of the disorder may be absent when the child is in a new or a one-to-one situation.

The number of symptoms specified is for children between the ages of eight and ten, the peak age range for referral. In younger children, more severe forms of the symptoms and a greater number of symptoms are usually present. The opposite is true of older children.

A. Inattention. At least three of the following:

1. often fails to finish things he or she starts.
2. often doesn't seem to listen.
3. easily-distracted.
4. has difficulty concentrating on schoolwork or other tasks requiring sustained attention.
5. has difficulty sticking to a play activity.

B. Impulsiveness. At least three of the following:

1. often acts before thinking.
2. shifts excessively from one activity to another.
3. has difficulty organizing work (this not being due to cognitive impairment).
4. needs a lot of supervision.
5. frequently calls out in class; aggressive behavior like hitting, poking, etc.
6. has difficulty awaiting turn in games or group situations.

C. Hyperactivity. At least two of the following:

1. runs about or climbs on things excessively.
2. has difficulty sitting still or fidgets excessively or overly talkative.
3. has difficulty staying seated.
4. moves about excessively during sleep.
5. is always "on the go" or acts as if "driven by a motor".

Figure 1. DSM symptoms of ADD (1980)

Investigators differ in their identification of the fundamental symptomology in ADD. Barkley (1981), whose population is drawn from a clinical setting, emphasizes deficiencies in rule-governed behavior. His research, for example, demonstrates that these children very often have problems with social conduct. Although they know the rules, they seem to lack the self-control to follow them. They also tend to be more negative and attention-seeking and in greater need of supervision than other children. Barkley seems to focus on the most severe form of ADD (which I call type 1) that is characterized by the ADD child who also demonstrates serious problems of social interaction (i.e. agressive behavior) with adults and/or peers. In contrast to Barkley's emphasis, Douglas (1983) worked exclusively with children without conduct disorder and/or family pathology. She characterized the ADD child as having the following primary deficits: (1) lack of investment, organization, and maintenance of attention and effort in completing tasks, (2) inability to inhibit impulsive responses, (3) lack of modulation of arousal levels to meet the demands of the situation, and (4) unusually strong inclination to seek immediate reinforcement. The work of Douglas has been significant in changing both the concept and the label of hyperactivity to ADD, which can include children with problem symptoms who are only mildly hyperactive or not hyperactive at all. It is these non-aggressive types of ADD, which I call types 2 and 3, that should be of particular concern to the school psychologist since their problems are more subtle but quite problematic in the school setting.

Undifferentiated ADD is a relatively new term used in the 1987 revision of DSM III. In this form of ADD the primary and most significant characteristic is inattentiveness; hyperactivity is not present and thus it is more of a hidden handicap. Nevertheless, these children still manifest problems with organization and distractibility and they may be seen as quiet or passive in nature. It is speculated that Undifferentiated ADD is currently under diagnosed as these children tend to be overlooked more easily in the classroom.

As school psychologists we are exposed to a much broader sample of children with problems in school, than a clinician who evaluates children who have the most severe forms of problems and whose parents want and can afford treatment. This fact applies to our sampling of the ADD student in the school setting where we evaluate the entire range of students who demonstrate symptoms of ADD, not just the severe forms. The four distinct types of ADD which are present in the school population will be discussed throughout this text. (see page 5)

Diagnostic categories or syndromes that have been related to or synonymous with ADD in the past include: Hyperkinetic Reaction of Childhood, Hyperkinetic Syndrome, Minimal Brain Dysfunction, Hyperactive Child and Minimal Cerebral Dysfunction. In addition, such labels as "organic driveness", "postencephalitic behavior disorder", "restlessness", "fidgety phils", "conduct disorder", "brain-damaged child, "brain injured child, and others (over 20 in all) have been used. Since 1987 the revised third edition of the Diagnostic and Statistical Manual of Mental Disorder

(DSM-III-R)) has again changed the label to Attention Deficit Hyperactivity Disorder (ADHD), which re-emphasizes hyperactivity as a central symptom. It is my opinion that the ADHD label as is not as valid as the ADD label described in DSM-III (1980). In other words, a child can demonstrate ADD symptoms without the symptom of hyperactivity (or only mild hyperactivity) and that this condition may require treatment, including medical intervention (i.e., medication) in order to reduce symptoms and facilitate optimal school learning for that child. The term attention disorder will also be used synonymously with ADD throughout this book, but regardless of the label used, this type of disorder is inferred by someone knowledgeable of the symptoms, and, like most psychological syndromes, a diagnosis is inherently subjective because at the present we have no way to make it objective (e.g., blood tests) even though "true" ADD is thought to have physical origins.

School Related ADD Categories

DSM labels have no scientific basis for their designation and this is especially true for ADD which explains why the label has changed so frequently. As school psychologists, we are not psychiatrists nor clinical psychologists. We are not required to use the designation in DSM I, II, III, or III-R or any International Diagnostic Manual for that matter.

Working within the school setting, which is the place where ADD children exhibit their symptoms to the highest degree, I have found that there are four types of ADD that warrant differentiation and like DSM there is no scientific basis for these categories either, although I think these distinctions will be meaningful to school psychologists.

The primary symptoms of ADD (i.e., inattention, impulsiveness and hyperactivity) can occur in various forms of behavior and in various combinations; nevertheless, all the primary symptoms (or any one of them) manifest themselves as "problem behavior" in the school setting. There are four types of ADD that seem to occur within the school setting that have important differences in terms of characteristics, school problems, treatment and prognosis. The various types of ADD are differentiated in chart form in Figure 2.

Type 1 is essentially the old category known as the hyperactive child who is also aggressive (i.e., aggressivity associated with the primary symptoms of hyperactivity and impulsivity). Unless misdiagnosed as "crazy," these kids are easy to spot and are usually diagnosed even before they enter school by the family physician because they are severe management problems wherever they go; some would label these children "monsters." The type 1 child is often seriously impaired in the area of social development. I've heard it said in jest that these children have such poor social skills that even their imaginary friends won't play with them. All forms of ongoing treatment throughout childhood and adolescence are usually required to successfully treat the type 1 student. The Type 1 child is seriously impaired and usually requires all forms of on-going treatment throughout childhood and adolescence.

The child with Type 2 or "mixed"

Figure 2

FOUR TYPES OF ADD FOUND IN THE SCHOOL SETTING

	Characteristics	Causes	School Problems	Diagnosis	Treatment	Prognosis
TYPE 1 **Hyperactive Impulsive Aggressive**	• pervasive problems in all settings (home/school) • all primary symptoms inattentive (sustained ADD) impulsive hyperactive (aggressive forms of hyperactive/impulsive behavior) • poor self control "immature" and uninhibited	• suspected neuro-developmental, e.g., neuro transmitter dysfunction (Dopamine) • aggressive behavior learned through coercive parenting and poor impulse control • increased incidence associated with prenatal drug exposure	• learning disabilities (50 to80%) • handwriting and written work delays common • behavior problems/disruptive - fighting - verbally abusive/noisey - grabby • social behavior problems moderate to severe; secondary emotional problems • school failure	• observations in any setting • easily diagnosed if hyper since or before birth •psychological assessment necessary to rule out possible learning disorder (LD) • pediatrician should refer to psychiatrist if possible	• medication often "tried" early. In addition, other combinations of interventions and treatments may be necessary: - behavior management - counseling - parent training - parent support group - special education - diet management	Prognosis is very poor unless practically all possible interventions or treatments are effectively employed. Conduct disorder, oppositional disorders and criminal behavior is prevalent in adolescence with this type
TYPE 2 **Mixed**	• moderate to severe for child and school • more problematic at school than home, i.e., "situational" • primary symptoms in varying degrees and combinations • described as "immature" • appear uninhibited • sustained ADD • not persistant	• neuro developmental • situational demands exacerbate symptoms e.g., school and other situations that demand attention/concentration	• learning disabilities present 25-50% • various L.D. processing weakness may be present, i.e., audio, video, and/or motor • secondary emotional problems and social adjustment problems • school failure	• pervasive history since pre school time • clinical evaluation sometimes • frequently referred for special education assessment • should be evaluated by school team even when LD symptoms absent	"multimodal" as needed. Unless severe problems are present, start with non-drug approaches: 1. generic strategies 2. behavior management 3. parent training 4. diet management 5. counseling 6. special education Medication when above doesn't work or are impractical	Unless agressive behavior is evident, prognosis is fairly good if proper treatment is delivered. Job and social adjustment tend to be below par as adults
TYPE 3 **Inattentive-Passive**	• mild to moderate for child and school • "ADD without hyperactivity" • situational and even task specific • work habit problems; social behavior usually adequate • appear to have hearing problems, but don't • Focused ADD (FADD)	• neuro-developmental plus situational demands • organic factors are still considered causative as with Types 1 and 2	• 20% LD • often have LD problems involving auditory processing, e.g., memory discrimation and audio figure-ground • underachievers • can result in school failure • associated self esteem problems • poor listening skills	• more subjective than types 1 and 2 • pervasive history of work habit problems at school • full assessment by school team necessary even when LD symptoms absent • cannot be diagnosed before age 8 • Longitudinal diagnosis often necessary	• never start with medication • use "least restrictive" approaches - generic strategies - behavior management -diet management - parent training • Sped. Ed. (if eligible) • medication when all else fails/low dosage	Good prognosis with corrective treatment. (Research not available to confirm this prediction) This form of ADD recognized only since 1980 as a disorder. Research needed.
TYPE 4 **Pseudo A.D.D.**	• mild to severe for child, family and school • ADD symptoms in various forms are present but transitional, i.e., child has good days and bad days	• situational • emotional e.g., anxiety or depression • can have biochemical origins, e.g., neurotransmitter dysfunction (Serotonin) or pre diabetic condition effects. • avoidance reaction to frustration (easily frustrated)	• 5 to 10% LD i.e., like general population • work habit problems and poor concentration • inappropriate social behavior can be problematic • SED • Behaviorally disturbed	• school assessment desirable to rule out true ADD • clinical confirmation desirable along with clinical treatment	• school treatment: behavior management • refer for counseling • medication for depression or anxiety (e.g., Tofranil, Norpramin, Buspar) • stimulant medication contra-indicated: Pre psychotic condition or tic disorders (Tourette)	Variable prognosis; depends upon severity of emotional involvement and causes which can be both situational and bio-chemical. Proper diagnosis and treatment is needed, especially therapy and medication, if needed.

ADD exhibits most of the primary symptoms, including mild to moderate hyperactivity but is not aggressive or out of control like Type 1. The child with mixed ADD can also demonstrate symptomatic problems at home during the pre-school years; these children sometimes do respond to non-drug treatment which should be tried initially, if practical.

The child with Type 3 is very different than the other types; these children are not hyperactive nor very impulsive, but they do have serious symptoms of inattention and distractibility although the suspected cause is still thought to be physiological. The Type 3 child is inattentive/passive in nature and is difficult to differentiate from the withdrawn daydreamer or from the child with auditory processes problems. We usually have to watch this child struggle in school for several years before we can begin to suspect ADD as a cause for their under achievement. Type 3 is the most difficult form of ADD to diagnose and for this reason mis-diagnosis, over-diagnosis, and under-diagnosis are more likely unless carefully and skillfully done. Non-drug approaches are the preferred modes of treatment for the Type 3 student.

The last type of ADD child to be found in the school setting to be discussed here really is *not* ADD. These children can have the symptoms and look like any of the other three types but these children have symptoms that are transient and are caused by "situational or "life stress" factors that produce emotional reactions which are manifested in symptoms of inattention, impulsivity and/or hyperactivity. The Type 4 child definitely has problems in school that require treatments like the true ADD child but the form of counseling and medical intervention would be quite different (e.g., in the case of some other childhood conditions, the use of stimulant medication is contraindicated).

Developmental Course of the Attention Deficit Disorder Child:

1. **Infancy:** temperamental profile of:
   - a. poor task persistence
   - b. difficulty in staying on schedule (sleeping and eating)
   - c. having a low threshold level, difficulty adjusting to changes in schedule
   - d. very active
   - e. irritability (i.e., "cry and fuss more than gurgle and coo")
2. **Preschool Age:**
   - a. high activity level
   - b. noncompliance
   - c. poor attention span
   - d. easily distracted
   - e. "reckless" behavior (injury prone)
3. **Elementary School Age:**
   - a. poor attention span
   - b. difficulty concentrating and/or finishing school work

    c. impulsiveness/lack of self-control
    d. poor social skills
    e. high frequency of off-task behavior
    f. increase in conduct problems (aggression, destructive, oppositional behavior), if hyperactive symptoms are present)
    g. disorganized/messy

4. **Adolescent:**
    a. low self-esteem
    b. social skills deficits
    c. learning problems
    d. poor problem-solving skills
    e. more conduct problems
    f. difficulty concentrating
    g. disorganized/messy
5. **Adult:**
    a. lower educational achievement
    b. poor social skills
    c. low self-esteem
    d. increase in anxiety
    e. continued problems with restlessness/poor attention span
    f. not psychotic
    g. increased risk of alcohol/drugs
    h. only 30-40% have adequate adjustment

ETIOLOGY

A 1987 Report to Congress prepared by the Interagency Committee of Learning Disabilities attributes probable cause of ADD to "abnormalities in neurological function, particular to disturbance in brain neurochemistry involving a class of brain neurochemicals termed 'neurotransmitters'." Researchers are unclear, however, as to the specific mechanisms by which these neurotransmitter chemicals influence attention, impulse control and activity level. In the past fifty years there have been incidences of childhood diseases that affected brain chemistry (e.g., encephalitis) which produced ADD symptoms in otherwise normal children. At the present time (1990) we are looking at a whole new group of children entering school with ADD. In these ever increasing number of cases, the cause of ADD is due to prenatal drug exposure, including alcohol, cocaine, amphetamine and heroine addiction by their mothers.

Although many ADD children tend to develop secondary emotions problems, ADD, in itself, may be related to biological factors and is not primarily an emotional disorder. Nevertheless, emotional and behavioral problems can frequently be seen in ADD children due to problems that these children tend to have within their school, home, and social environments. Such characteristics as inattentiveness, impulsivity, and underachievement can also be found in ADD students who suffer primarily from emotion and attentiveness and performance (i.e., pseudo ADD). Some students develop secondary symptoms of restlessness, inattentiveness, task avoidance, etc. because of a specific learning disability; these students should not be considered ADD. Differential diagnosis, therefore, is an essential prerequisite to effective treatment.

True attention disorders (Types 1, 2 and 3) are attributed to neurophysiological brain dysfunction due to various causes including endogeous factors (heredity), illness, injury and prenatal insult.

In the fifth edition of her book on ADD, Wendy Coleman, M.D. elaborated on most of the known organic causes of ADD. Coleman's delineation (1988) of causative factors includes most of the associated physical disorders listed below.

Organic Causes of ADD:

1. Primary ADD is usually inherited. Health and developmental information might reveal that learning problems and/or attention problems run in the family.
2. ADD associated with specific neurologic disorders:
    - a. Tourette Syndrome
    - b. Neurocutaneous Disorders
        1. Tuberous Sclerosis
        2. Neurofibromatosis
    - c. Williams Syndrome
    - d. Seizure Disorders
    - e. Learning Disorders
3. ADD associated with affective disorder. The association of ADD with an affective disorder (usually depression) is complicated:
    - a. These two disorders can occur simultaneously within an individual.
    - b. Treatment for ADD with stimulants can worsen depression, although for some children it seems to act as an anti-depressant.
    - c. Depression can be the sole cause of ADD symptoms (pseudo ADD).
    - d. Depression disorders are also inherited and can have suspected biochemical origins.
4. ADD associated with Chromosomal Abnormality. Fragile X Syndrome is the only chromosomal abnormality associated with ADD. These children, usually boys, who inherit this condition also suffer from mild to severe retardation.
5. Secondary ADD due to Fetal Injury
    - a. Fetal Dilantin Complex
    - b. Fetal Alcohol Syndrome (FAS)
    - c. Fetal Alcohol Effect (FAE)
    - d. Prenatal Drug Exposure. Uncontrolled substance and street drugs (i.e., heroin, cocaine and amphetamines) when taken by pregnant

phetamines) when taken by pregnant women exposes their unborn child to all sorts ofdevelopmental disorders, including ADD. The socalled "drug babies" are presently (1990) starting to make a very unfavorable impact upon the schools. These at-risk children often exhibit ADD symptoms and represent a whole new wave of children with ADD problems.

- e. Prenatal infection
  1. Cytomegalic inclusion virus (CMV)
  2. Toxoplasmosis
- f. Chronic hypoxia (oxygen deprivation)
- g. Acute hypoxia (oxygen deprivation usually due to trauma at birth, e.g., breech delivery, umbilical cord prolapse, etc); these at-risk babies usually experience breathing, feeding and movement problems immediately following birth and are historically significant.
- h. Prematurity (birth weight under two pounds)

6. Secondary ADD due to brain in jury in childhood.
   - a. Toxin exposure (e.g., lead poisoning).
   - b. Brain infections. Complications of bacterial meningitis or viral encephalitis have historically been linked to hyperactivity and ADD symptomology.
   - c. Complications of severe brain injury, e.g., head injury sustained in automobile accident.
   - d. Injury caused by cranial radiation (e.g., as a part of leukemia treatment).

Causes of Pseudo ADD:

Pseudo ADD Type 4 as described in figure 2, page 5 is just what you might think it is. A child may exhibit symptoms of ADD, including inattention, impulsivity and/or hyperactivity, but these symptoms are caused by emotional and/or other physical and neurophysiological conditions. For example, affective disorders like depression and anxiety can produce transient symptoms of inattention, implusivity and hyperactivity, due to a combination of biochemical and life stress factors; and for this reason differential diagnosis is extremely important. Listed below are some of the known physical and emotional conditions that are associated with ADD symptoms but are not true ADD:

1. Affective disorders including depression and anxiety
2. Frustration/avoidance reaction to a learning disorder
3. Lack of motivation (conduct disorder)
4. Boredom
5. Physical and sexual abuse
6. Hirschprung's disease
7. Chronic fatigue
8. Poor nutrition
9. Family stress and violence
10. Hyperthyroidism
11. A typical seizure disorder (petit mal)

Causes Related to Prenatal Drug Exposure

There's going to be a whole new generation of children who have ADD as a result of prenatal drug exposure. A recent national study of inner city and suburban hospitals revealed that 11% of infants were exposed to drugs in utero. Statistics from NIDA of 1985 are that of women of childbearing age, 8 to 14% are "chemically" dependent. Of these 5 to 8% are alcohol dependent, 2 to 3% are dependent on mood altering prescription drugs, 2 to 3% are cocaine dependent and 0.5% are narcotic dependent. Of note, a 1988 study indicated a decrease in "casual drug use" among the general population, but an increase in intensity of drug usage among those presently addicted. There has been a great deal of media coverage concerning certain drugs such as "crack". Crack is alkaloidal form of cocaine that is smoked in "rock" form and gives a "high" that lasts about 10 to 20 minutes. It is extremely addictive, is readily available and inexpensive. There are some recent studies that indicate some success in the treatment of crack addiction with various medications. The current pattern of drug use varies in parts of the country, partly due to "supply and demand". One of the common patterns is that of poly drug use. For example, dependent women using "uppers", such as cocaine, amphetamines) frequently also use "downers" such as alcohol, marijuana, etc. to "come down". There is a high rate of cigarette smoking among this population as well. All of these drugs or combinations can affect the fetus and getting accurate drug histories during pregnancy is very difficult. Also, drug dealers may cut drugs with other drugs and since these are "uncontrolled substances" the user doesn't really know what they're taking.

Dr. Barbara Bennett, who is a developmental pediatrician with the University of California (San Francisco) Media Center, has had considerable experience with the topic of prenatal drug exposure and its effects on early childhood development and childhood behavior. In the area of developmental concerns, Dr. Bennett reports that the problems range from significant global developmental delays to family specific delays. Microcephaly is reported with Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Effects (FAE) as well as with methadone, heroin, marijuana or cocaine exposure. Fine motor and language development delays have been areas of concern identified with some drugs, but the prognosis is not clear at this time since these children are just now entering the school age population.

Behavioral concerns in infancy include difficulty in state organization (i.e., sleep/wake cycles), even in full term infants, has been identified. Sleep/wake patterns can be distorted with irritability. These babies produce a lot of aversive stimuli which can further complicate the vulnerable infant/caretaker relationship. In other words, these children, if cared for by their natural mother, are also at risk for physical and emotional abuse because they are so difficult to take care of and characteristically, their caretaker has had a history of difficulty coping with aversive stimuli.

Other behavioral concerns noted for children who were drug exposed before birth are directly related to ADD symptoms: attention problems, distractibility, impulsivity and hyperactivity. ADD problems are already known to be related to children with fetal alcohol exposure. There is some evidence (Bennett, 1989) that organizational problems for some infants exposed to cocaine manifests itself as a difficulty in changing from one activity to another. There also seems to be difficulty in some children with visual and auditory attentiveness.

There will be an additional batch of children who, when they enter school, will demonstrate all the problem symptoms of ADD in the nature of types 1, 2 and 3. These children will have a neurodevelopmental condition just like the ADD children who contracted the condition in a more "natural" manner. This fact, if it comes to pass, will greatly increase the number of children diagnosed as ADD. ADD is likely to become even more prevalent than the current estimate of 3 to 5% of the general school age population.

A school psychologist should be aware of the foregoing information because it will likely have a tremendous impact upon their role in the school setting. These children will definitely be at risk for learning disabilities, ADD and all sorts of other developmental disorders.

A Brief, Imprecise History of ADD

The childhood condition we now know as ADD, ADHD, Hyperactivity or the like was first described in the literature in 1902 by George Still. These children were described as having poor self control and being overactive. Still concluded that these children were lacking in sociability caused by "a defect in moral control". In other words, the cause of these symptoms were at first thought to have a social-emotional origin although other observers at the time made the connection between hyperactive behavior and children with known brain damage or disease.

The association of hyperactivity and brain function was strongly supported by the 1918 encephalitis epidemic, when doctors observed that many children developed a hyperactive behavior pattern following recovery from encephalitis. Ebaugh first described this condition and labelled it Post-encephalitic Behavior Disorder.

The connection of brain damage and hyperactive behavior in children was supported by studies of children with epilepsy and other central nervous system disorders. The cases of hyperactive children with no known brain damage was attributed to "minimal brain damage" or "minimal brain dysfunction" and these terms were widely used in the 1950s.

More than fifty years ago, Bradley (1937) was the first to report in the literature that a stimulant drug (Benzedrine) had the surprising effect of calming hyperactive post encephalitic children. Bradley stated that "a large proportion of the children became emotionally subdued without, however, losing interest in their surroundings...possibly the most spectacular change in behavior...was the remarkable improvement in school performance of approximately half of the children."

Although the use of stimulant medication to treat hyperactive children was not widely practiced until the 1950's, it was now evident that there was organic factors related to the cause of hyperactive behavior.

Research during the 1940s and 50s in the causes of ADD or Hyperactivity (which was the label at the time) continued to look at organic factors including heredity, brain damage and specific neurological causes. Also, during this time there was an increasing use of stimulant medication as the primary treatment. There was a great deal of emphasis on hyperactivity as an "organic syndrome" associated with varying degrees of brain damage. Other areas of child development research associated with hyperactivity and physical causes were also being studied—learning disabilities and minimal brain dysfunction.

Stimulant medication was becoming a popular form of treatment for hyperactivity. Dexadrine was the drug used in the 1940s and Ritalin became the drug of choice in the 50s. During the 1960s, stimulatant medication was widely used even for other childhood conditions including anxiety, depression, aggressive behavior, psychosis and school phobia. In other words, stimulant medications were being used to treat all sorts of disorders which may or may not have had hyperactivity as a symptom of "Hyperkinesis" which was the label in 1968. The result in the 1970s was a medication backlash among physicians and the general community. Physicians became reluctant to prescribe medication even for those children who truly needed the treatment (i.e., those students with true hyperactivity due to neuro-physical causes). This reaction to the use of medication to treat hyperactive children also coincided with the development of other treatment methods including: diet management (Feingold) and behavior modification strategies which were tried instead of medication.

The anti-drug backlash during the 1970s was both good and bad. This issue was examined by Dulcan as follows:

> "Teachers and physicians were widely accused of being in league with pharmaceutical companies to "drug" children, especially the poor, into submission. In retrospect, the fault can be attributed more to over enthusiasm than malevolence or greed. A useful result of the outcry was a wave of more scientific studies of the characteristics of children who might benefit and the short and long term effects of stimulant medication."

In the 1970s the emphasis on the symptom of hyperactivity changed to the primary symptom of inattention/distractibility. With the work of Douglas 1972), scientists turned to the study of attention span problems in hyperactive children. The symptoms of inattention and impulsiveness were now seen as the main factors that interfered with learning and social adjustment. With the new focus on the problem of inattention in children, this disorder was now viewed as a neuro-developmental condition and no longer seen exclusively as an organic syndrome caused by brain damage. This new emphasis was reflected in the professional nomenclature as described in DSM-III (1980) with the new label - Attention Deficit Disorders (with or without hyperactivity).

Since 1980 with the new label of ADD which included the primary symptoms of inattention, impulsiveness and/or hyperactivity, the problem of over diagnosis again emerged. ADD without hyperactivity is difficult to diagnose accurately without extensive background information and psycho educational assessment. Nevertheless, many children demonstrate ADD symptoms and once the diagnosis is made by a medical practitioner (e.g., pediatrician, neurologist, psychiatrists, etc.) the first course of treatment is often medication. Again, experimentation with drug treatment with students diagnosed with ADD created another anti-drug backlash, especially among parents in our present "drug conscious" society. Fuel for this backlash has been provided by the media which has emphasized mistakes in diagnosis, along with controversy-producing sensationalistic TV talk shows like the one hosted by Geraldo Rivera.

Mistakes in diagnosis and the anti-drug sentiment, prompted the American Psychiatric Association to again change the label. In 1987 the revision of DSM III (DSM III-R) created the new label of Attention Deficit Hyperactivity Disorder (ADHD) and undifferentiated ADD.

Diagnosis

Students who have exhibited the characteristics of inattention, impulsivity and/or hyperactivity from an early age may be at risk for having an attention deficit disorder. However, a diagnosis of attention deficit should only be made after ruling out other factors related to medical, emotional or environmental variables which could cause similar symptoms, e.g., childhood depression or anxiety disorder. Therefore, physicians, psychologists, and educators should conduct a multi-disciplinary evaluation of the child including medical studies, psychological and educational testing, speech and language assessment, neurological evaluation, and behavioral rating scales completed by the child's parents and teachers. A health and developmental history reported by parents that shows evidence of primary symptoms noted during the preschool years is very important information to obtain in the diagnostic process.

In the school setting, the ADD child often demonstrates significant problems that take the form of learning disabilities, inappropriate social behavior, and/or work habit problems. The ADD child is obviously "at risk" for failure at school and this child will frequently be referred for psycho-educational assessment. The school psychologist is often in the position of coordinating the psychoeducational assessment process and has access to crucial information in order to accurately diagnose the child with ADD symptoms. Critical information regarding a particular student comes from the following sources: health and development history, school records (e.g., cumulative file), classroom observations, observations in testing, psychometric data, and parent/teacher behavior rating scales.

A thorough evaluation of a child suspected of ADD should be conducted within the school setting by a multi-disciplinary team comprised of the regular education teacher, special education teacher, school psychologist and a speech therapist. The assessment information, including data from the parent, is gathered and documented by the school psychologist in a psychoeducational report which will recommend appropriate treatment for the student in question.

Treatment

Treatment of the ADD child usually

requires a multi-modal approach frequently involving a treatment team made up of parents, teachers, the school psychologist, physicians, and behavioral or mental health professionals. Various forms of treatment include the following:

A. Educational (School-based treatment)
  1. Generic classroom strategies
  2. Special education programs
  3. Behavior Management

B. Counseling (parent and child)
  1. Demystification
  2. Cognitive behavioral therapy (CBT)
  3. Parent support groups

C. Medical (pediatrician, psychiatrist, neurologist)
  1. Medication
    a. Stimulants (e.g., Ritalin)
    b. Anti-depressants (e.g., Trofranil)
  2. Diet management
    a. High protein breakfast
    b. Allergy control

D. Parent training (home-based)
  1. Parent training in behavior management
  2. Deliver medical treatment
  3. Follow through of home/school monitoring
  4. Counseling

Without appropriate treatment, ADD can cause school failure, rejection by peers and family turmoil, all of which can lead to developmental delays and psychiatric complications stemming from low self-esteem and frustration. The prognosis is particularly poor for those children that develop aggressive behavior in addition to the primary symptoms of ADD. The worst form of ADD (aggressive) can often lead to oppositional, antisocial and criminal behavior.

Medication

The use of medication alone in the treatment of ADD is not recommended. As indicated earlier, a multimodal treatment plan is usually followed for successful treatment of the ADD child or adolescent. While not all children having ADD are prescribed medication, in certain cases the proper use of medication can play an important and necessary part in the child's overall treatment.

Ritalin, the most commonly used medication in treating ADD, is a psychostimulant and has been prescribed for over 30 years with very favorable results and minimal side-effects. Other psychostimulant medications which are used to treat ADD are Cylert and Dexedrine. In the past several years antidepressant medications such as Tofranil and Norpramin have also proved successful in treating the disorder. All these medications are believed to affect the body's neurotransmitter chemicals, deficiencies of which may be the cause of ADD. Improvements in such characteristics as attention span, impulse control and hyperactivity are noted in approximately 75% of children who take psychostimulant medications. It is important that teachers are informed about all medications that an ADD student may take as teachers need to work closely with the child's parents and other helping professionals in monitoring medication effectiveness.

Medication side effects such as appetite loss, sleep difficulties, and/or lethargy in the classroom, among others, can often be controlled through medication dosage adjustments when reported by the child's parents or teachers.

Epidemiology of ADD/Research Summary

1. 3% of the students in school are actually diagnosed as hyperactive by a physician and only about half of that 3% continue to keep that diagnosis (Boscoe and Robin, 1980).

2. The prevalence of hyperactivity in boys over girls coincides with the prevalence in learning disabled students, which is about 5 to 1. There is no data at present that show the boy versus girl ratio for ADD without hyperactivity. It would seem reason able that the distribution would be even for girls and boys and the incidents of ADD in the general school age population would be closer to 5% since this sub group was previously not recognized.

3. 60% - 80% of ADD students have learning disabilities and conversely 20% of learning disabled students are diagnosed as ADD (Silver 1988).

4. Appropriate treatment for ADD in childhood is very important. Without treatment for ADD the consequences in adulthood can be serious. Follow-up studieshave shown that 30% to 60% of children diagnosed hyperactive continue to have symptoms as adults, including poorer work records, lower self-esteem, more antisocial behavior, and/or other indicators of psychopatholog (Weiss, 1985). Other research on actual criminal behavior of adults originally diagnosed hyperactive as children (Satterfield, Hoppe and Schell, 1982), showed that over 50% of this population had actual arrest records before age 21 and many of the offenses were for aggressive behaviorsuch as aggravated assault, rape, etc.

   It appears that for ADD children and especially those with serious symptoms of hyperactivity-impulsiveness and aggressive behavior are likely to demonstrate symptoms in adolescence and young adulthood consistent with a diagnosis of conduct disorder or oppositional behavior.

5. ADD is thought to have neurological causes and related to brain function; nevertheless, neurological tests are not necessary. Even soft neurological signs (e.g., visual motor deficits) which are present in more than 10% of normal children, are inconsistently found in a higher proportion of ADD children (Rapaport and Ferguson, 1982. In other words, the absence of either hard or soft neurological signs cannot itself rule out the diagnosis of ADD.

The following medical factors were shown to differentiate hyperactives from normals (Hartsough and Lambert, 1985).

- Mothers of hyperactives reported poor health during pregnancy.
- Mothers of hyperactives were more likely to be under 21 when child was born.
- Hyperactives were more likely to be first born.
- Mothers of hyperactives were more likely to have experienced

toxemia or eclampsia during pregnancy.

- Mothers of hyperactives were more likely to have had labors over 13 hours.
- Hyperactives were twice as likely to have evidence of fetal distress, head injuries or other birth trauma.
- Hyperactives were more likely to be born late, i.e., gestation age of 10 months or later.
- Premature or low birth weight did not differentiate hyperactives from normals.
- Hyperactives were more likely to have had medical complications or malformations at birth. Also, research is currently underway to determine the connection between alcohol, nicotine, caffeine, and other drug abuse during pregnancy and subsequent ADD symptoms in children.

ADD children tend to be physically immature; smaller in stature, clumsy and often exhibit poor handwriting; however, these aforementioned soft neurological signs are present inconsistently.

6. Research facts about medication:
   a. Medication is not the only treatment for ADD and, as a matter of fact, medication should not be the only treatment for any particular ADD child. Unfortunately, despite long-standing recommendations for multimodality treat ment (Satterfield, Satterfield, and Cantwell, 1981), evidence that integrated approaches are used in practice is lacking (Gadow, 1983).

   b. Epidemiologic studies conducted in the late 70s (Bosco and Robin, 1980; Sandoval, et al, 1980) showed that in the school population studied about 3% had been diagnosed as hyperactive and that less than 1% were on stimulant medication.

   c. By itself, stimulants do not have significant effect upon measures of academic achievement (Barkley, 1981; Kavale, 1982; Keogh and Barkett,1980; Thurber and Walker, 1983). The high proportion of ADD students who also have learning disabilities would account for this fact and the likelihood that these students also need remedial and special education services which again supports the idea of multi-faceted treatment.

   d. Stimulant medications do affect school grades in a positive manner since classroom behavior and improved work completion definitely influence teacher judgement in grading. In other words, many teachers grade heavily on production rather than knowledge, and stimulants may increase the former without changing the latter.

   Improved performance on specific psychological tests have been demonstrated to be the result of stimulant medication treatment: visual motor tests, tests of reaction time and certain scales of a well known (WISC-R) intelligence test (Kavale, 1982; Whalen and Henker 1976, Rapoport et al, 1980).

   e. For the ADD child, the most salient effect of stimulant medication is on social behavior in relation to peers and adults. The ability of stimulant medication to decrease classroom disruption and improve behavior as rated by parents and teachers is well documented (Whalen, et al., 1979, 1981; Whalen, Henker and Dotemoto, 1980). It's no wonder that the ADD child developed personal and social problems. They do not behave normally and parents, teachers, and peers have difficulty relating to them in a positive manner. These children, because of their tendency to be highly inattentive, impulsive, and/or hyperactive, have high levels of off-task behavior and low responsiveness to parent and teacher directives. Two studies involving the parent-child relationship (Barkley, 1981) showed that both parents and teachers demonstrate higher than normal rates of directives and tend to be more negative/punitive toward the ADD child. These parents, in desperation, resort to highly, coercive practices to the extent of physical abuse. Both of these investigations found that when Ritalin was used there was a significant increase in child compliance and on-task behavior and correspondingly a reduction in adult commands and an increase in positive adult attention.

f. The one side affect most feared by parents is the possibility of addiction to the stimulant medication. Ironically, there is little or no evidence in the literature to support this concern. Only one case has been documented where a prescribed drug for ADD (Ritalin) became a problem of abuse in an adolescent (Goyer, Davis and Rapoport, 1979).

ADD Problems and the Role of the School Psychologist:

1. School psychologists deal with students with problems: learning problems and/or behavior problems. ADD symptoms cause mild to severe problems that can impede learning, work habits and normal social behavior.
2. About two thirds of school referred problems involve ADD symptoms to some degree, i.e., inattention or poor attention, impulsiveness and/or hyperactivity. These symptoms are constantly being reported to school psychologists as part of the problem whether it involves a learning problem and/or a behavior problem. The school psychologist is often the primary person parents and teachers turn to for an evaluation and for treatment recommendations.

3. The school psychologist must be the diagnostic expert when it comes to ADD problems because he or she is in the best position of any professional to do the following:
   a. To determine the severity or seriousness of the ADD symptoms as they relate to learning and/or behavior problems at school and sometimes at home.

   b. To determine the suspected cause of the ADD symptoms which can be (1) neurodeveopmental in the case of what we call true ADD or, (2) emotional (i.e., anxiety and depression) as in the case of what we call pseudo ADD.

   c. To recommend an appropriate course of treatment regardless of what we suspect is the cause. Depending upon the cause and the severity of the problem, we might recommend different treatment approaches, but regardless of the cause, we must recommend appropriate treatment. That is the job of the school psychologist.

d. To appraise what resources are available as part of our course of treatment. For example, are the parent(s) capable of delivering a behavior management system at home? Can the classroom teacher carry out a reward system in the classroom? Can the parent(s) be consistent in administering medication? Should other approaches be "tried" before "trying" medication? Are you dealing with an ADD sophisticated pediatrician? Does the student need special education?

e. To collect information about the child through direct and indirect assessment (which is the content of Chapter 2) and gather information from appropriate sources (e.g., parents, teachers, specialists, etc.) as part of a multi-disciplinary team assessment.

f. To document all pertinent infomation in the form of a psychoeducational report (i.e., case study, case report, psychological report or whatever you want to call it) that school psychologists do all of the time as part of their job. Chapter 3 is devoted to the psychoeducation report.

g. To evaluate the effectiveness of the course of treatment and communicate information to those involved in the treatment process, such as parents, teachers, and medical experts (if involved). As part of the evaluation of treatment, we would also be the facilitator of problem solving and trouble shooting at times when treatment isn't working as expected.

ADD is thought of as a clinical syndrome but in reality it is a condition tailor-made for a school psychologist to evaluate, diagnose, determine and coordinate appropriate treatment. ADD manifests itself as problems within the school setting and a school psychologist, who does psychoeducational assessment, will play a primary role in providing appropriate assistance to the teacher, parents and especially, to the child. A school psychologist may, in fact, be the most important professional in the diagnosis and treatment of the ADD child.

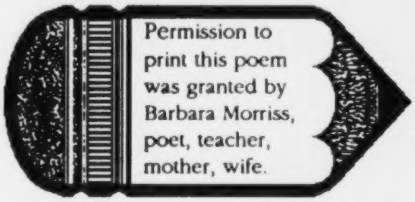
ATTENTION!!!!

I have trouble in school
Some things I just don't get.
The rules are simple enough
Like, "Children, please sit!"

Johnny, Yolanda and Jose
Do just fine
They sit and they sit
But that's their case, not mine!

You see I'm impulsive,
Distractable at best
To sit and do a task
Is an impossible test

I try, I really do
But I fail everytime
I am up out of seat
A heinous crime.


Permission to print this poem was granted by Barbara Morriss, poet, teacher, mother, wife.

My brain must be damaged
It doesn't work quite right
This kind of condition
Is an unfortunate plight

For kids like myself
There is help if you will
Special classes and contracts
And a controversial pill.

Given all of my symptoms
I've experienced these years
And a loving parent
To help relieve my fears.

And a knowledgeable teacher
To keep me on track
And a group of peers
(For friendship I lack)

And a good school psychologist
Who works with the best
My parent, my teacher
My doctor...the rest.

Given all the above
Even kids like me
Will funciton in school
MORE EFFECTIVELY!!!!

Diagnosis: The Role of the School Psychologist

Introduction

True ADD, which has a physiological basis, can manifest itself as school related problems including learning problems, work habit problems and/or social behavior problems. The school psychologist already has the diagnostic tools as well as direct access to all the important information about problem students. No other professional is in a better position than the school psychologist to confirm or rule out the existence of ADD with an individual student. The school psychologist has a unique opportunity to directly observe and assess the problem child in the setting where that child performs; the setting where the problems are prominently exhibited—the school.

Since the school psychologist deals primarily with students who have problems in school, it would be conservative to estimate that at least half of all school-problem referrals involve students who exhibit some of the primary symtoms of ADD, especially inattentiveness and distractibility. Since ADD also manifests secondary complications related to learning disabilities, work habits and social behavior, it is easy to estimate that well over 90% of referrals made to the school psychologist will include these problems. This may be an exaggeration to make a point, but practically all children referred for assessment exhibit some problems that could possibly be caused by ADD. It is the job of a school psychologist to rule out this possibility.

Of course, not all of these students have true ADD due to neurodevelopmental factors. We can never conclude that any condition exists just because we have observed some of the symptoms (e.g., if you cough, do you have tuberculosis? If you reverse a letter, do you have dyslexia?) Nevertheless, it is within the role of the school psychologist to determine the possible cause of the symptoms and make the most accurate diagnosis possible. A correct diagnosis is a prerequisite to correct treatment.

Diagnosis: Clinical vs. Educational

The symptoms of ADD are most significant and most problematic in a school setting. ADD is a serious educational problem. As a school psychologist, we assess the severity of the problem in the setting in which the symptoms are most likely to occur. ADD symptoms can interfere with some or all of the learning processes involved in education: 1. Learning academic skills (3 Rs) 2. Learning appropriate social behavior 3. Acquiring appropriate work habits.

In the clinical setting, a parent brings to the clinician reports about behavior observed at home or second hand information reported by the teacher about behavior observed at school. Often clinicians will differentiate between "situational hyperactivity" (ADD) and "pervasive hyperactivity"; both forms can stem from physical causes.

From an educational viewpoint, there are other forms of ADD which may require differential diagnosis relevant to differential treatment. Figure 3 again summarizes the four types of ADD related to the school setting that will be discussed throughout this text.

Figure 3 **The Four Types of ADD : DIAGNOSIS**

	School Problems	Diagnosis
TYPE 1 **Hyperactive Impulsive Aggressive**	• learning disabilities (50 to80%) • handwriting and written work delays common • behavior problems/disruptive - fighting - verbally abusive/noisey - grabby • social behavior problems moderate to severe; secondary emotional problems • school failure	• observations in any setting • easily diagnosed if hyper since or before birth • psychological assess ment necessary, to rule out possible learning disorder (LD) • pediatrician should refer to psychiatrist if possible
TYPE 2 **Mixed**	• learning disabilities present 25-50% • various L.D. processing weakness may be present, i.e., audio, video, and/or motor • secondary emotional problems and social adjustment problems • school failure	• pervasive history since pre school time • clinical evaluation sometimes • frequently referred for special education assessment • should be evaluated by the school team even when LD symptoms are absent
TYPE 3 **Inattentive-Passive**	• 20% LD often have LD problems involving auditory processing, e.g., memory discrimation and audio figure-ground • underachievers • can result in school failure • associated self esteem problems • poor listening skills	• more subjective than types 1 and 2 • pervasive history of work habit problems atschool • full assessment by school team necessary even when LD symptoms absent • cannot be diagnosed before age 8 • Longitudinal diagnosis often necessary
TYPE 4 **Pseudo A.D.D.**	• 5 to 10% LD, i.e., like general population • work habit problems and poor concentration • inappropriate social behavior can be problematic • SED • Behaviorally disturbed	• school assessment desirable to rule out true ADD • clinical confirmation desirable along with clinical treatment

The four types of ADD mentioned here represent different problems in the school setting. Not all ADD children will look like the Type 1 child who stands out so prominantly because it is the most severe form of an attention disorder.

In fact, most of the literature on ADD and the hyperactive child is devoted to this Type 1 category.

The Role of the School Psychologist in the Diagnostic Process

Even though most school psychologists spend a lot of time and energy in diagnosis, we are not clinical psychologists, and fortunately, we don't have to contend with all those pedantic clinical labels when it comes to making a diagnosis (e.g., DSM criteria). Simply stated, the school psychologist deals with the identification and diagnosis of problem students within the school setting. The kind of problems that students exhibit at school can be classified as one or more of the following general categories:

1. Academic skills problems
2. Work habit problems
3. Social behavior problems

The School psychologist usually operates as part of a diagnostic team to assess the severity of the school program (i.e., 1, 2 and/or 3 listed above. We use diagnostic categories that pertain to special education programs.

1. Learning Handicapped
2. Communicatively Handicapped
3. Physically Handicapped
4. Severely Handicapped

(Note: These are California categories of special education.

To determine eligibility for special education or to make treatment recommendations related to a particular student, we make inferences about the cause of the problem based upon our assessment information. Figure 4. delineates the school psychology process of school problem identification, diagnostic categories of special education and related causes of school problems.

School problems

ACADEMIC SKILL PROBLEMS

Oral expression
Listening comprehension
Written expression
Basic reading skills
Reading comprehension
Mathematics calculation
Mathematics reasons

WORK HABIT PROBLEMS

Easily distracted/off task
Not complete assignment
Not follow directions
Not work independently
Delays starting work
Gives up easily
Wastes time
Daydreams
Produces messy work
Easily frustrated
Refuses tasks

SOCIAL BEHAVIOR PROBLEMS

Disrupts the class
Disturbs other students
Overly excitable, impulsive
Childish and immature
Appears restless
Defys authority
Appears withdrawn
Appears fearful/anxious
Appears depressed
Uncooperative
Aggressive toward peers

Diagnostic Categories: Special Education

Diagnostic Categories
Special Education Programs (California)

1. Learning Handicapped
   a) Learning disability
   b) Low intellectual functioning (mild retardation)
2. Communicatively Handicapped
   a) Speech therapy (itinerant)
   b) Severe disorders of language (special class)
3. Physically Handicapped
   visually impaired
   hearing impaired
   orthopedically handicapped
4. Severely Handicapped
   a) Retarded (moderate to severe)
   b) Seriously Emotionally Disturbed (SED)

Causes of School Problems

1. emotional problems
2. learning (processing) disorder
3. attention disorders
4. curriculum inappropriate
5. slow learner
6. cultural differences
7. environmental deprivation
8. sensory deficit (hearing/vision)
9. physical problem
10. learned problem
11. social/emotional immaturity
12. poor behavior management
13. developmental delay
14. sensory-motor deficit

Figure 4. School Problems: Diagnosis in School Psychology

The Diagnostic Tools of the School Psychologist

Whether learning disabilities are present or not, it is essential that the school psychologist conduct and coordinate the diagnostic process in the setting in which the student is having major problems—the school. The diagnostic process to rule out ADD is no more time consuming nor more difficult than it would be for a learning disabled child. It's a matter of looking for key factors and critical information that is readily available to, and often only available to, the school psychologist in the school setting.

THE SEVEN DIAGNOSTIC TOOLS OF THE SCHOOL PSYCHOLOGIST:

To emphasize again the school psychologist plays a unique role in the diagnostic process for ADD because s/he has access to all the key information needed to make the diagnosis:

1. Health and developmental history
2. School records
3. Classroom observations
4. Observations in testing
5. Psychometrics
6. Behavior rating scales
7. Behavioral intervention effect

For a school psychologist the above sources of information are routinely used in the assessment process for learning disabilities, behavior problems, etc. Now you are looking at the same data to rule out ADD. We really don't need to learn any new or elaborate testing procedure to evaluate symptoms of ADD, but we do need to learn how to interpret the data that we routinely collect.

We have no specific test for ADD that can aid in the diagnosis or confirm the diagnosis of observable symptoms. We have to make informed "guesses" or what psychologists call "inferences" about the pervasiveness of ADD and the possible organic predisposition (i.e., heredity, disease, insult or injury).

Nevertheless, there does seem to be one measure for the ADD child that generally does sort this child from the others much like it does for the learning disabled student. What's the name of this measure or test? The name of the big test is **SCHOOL** (and this is not an acronym). The ADD student (include the LD student also) with significant symptoms will literally not survive school without a lot of help and even with the best of help these students will bare the scars of their ordeal. School is an awlful place to be if you can't pay attention. And, when we are uncertain of the existence of true ADD in a particular student, we can be (and should be) conservative in our diagnosis and use the "test of time" in school to continue to evaluate simple modifications and the least restrictive forms of treatment. The test of time in school is what longitudinal diagnosis is all about; this concept is discussed in more detail toward the end of this chapter.

MADAM: The Seven Tools. The seven tools that we advocate school psychologists use to diagnose ADD described below is referred to as the "Monterey Model" or MADAM, which is another contrived acronym for Monterey Attention Disorder Assessment Model. The Monterey Model was developed as a systematic method for assessing children for ADD and LD by myself and Michael Colyer, Ph. D., school psychologists employed by the Monterey Peninsula Unified School District in Monterey, California.

1. TOOL THE HEALTH AND DEVELOPMENTAL HISTORY

The current state of the art and/or science regarding ADD indicates that it is a physical (i.e., neuro-physiological) condition. True ADD is a pervasive condition whose symptoms should have been observed to some extent since birth or at least prior to age two.

In itself the pervasiveness of ADD symptoms since early development in the child is a critical diagnostic piece of information. We recommend that a thorough health and developmental history be obtained from the parent by either the school psychologist or school nurse. The history should include questions or items regarding the child's behavior which would involve motor activity, impulsivity, distractibility, etc. Parents of children who demonstrate ADD symptoms will often say that their child was colicky, had difficulty sleeping, would not obey or follow directions or complete simple tasks. Parents sometimes suspected hearing problems because of the child's inability to listen. The fidgetiness of hyperactivity may or may not have been observed but the problems of inattention and impulsiveness should have been observed before the child attains schools age.

> History (quoted from Friedman and Doyal, 1987, p.9)
>
> The child's past history is the most important source of information. Although it amuses many observers, mothers of hyperactive youngsters often say that they knew that their child was more active while they were still carrying him. "I think my ribs were bruised from the inside from the sixth month on," one mother said with a hint of a smile. The history of most children with Attention Deficit Disorder is not that clear. But usually careful questioning by a professional and equally careful thought and reconstruction of a child's early years by the mother and father yield important information about activity level and early temperament patterns.

26

We try to determine whether the child was more squirmy as an infant, possibly more colicky, more irritable. A common feature in the early history of youngsters who are later determined to have Attention Deficit Disorder is the report that "he didn't adjust to new circumstances very well." For instance, when changes in feeding were instituted or attempts were made to change babysitters or sleep habits, the child found it more difficult than other children to get used to the new routines.

As a child gets older, it is important to give some thought to how well he is able to pay attention compared to other children. Did he sit quietly and listen to a story when he was three years old? How long could he sit and go through a picture book with his mother? Did he watch television? Did he ever watch a television program all the way through? There are long lists of such questions that you can probably develop yourself that would give you some idea about how impulsive, active, and attentive your children have been.

The developmental course of the ADD child from infancy to preschool age often includes problems of irritability, erratic sleep patterns, difficulty staying on schedule, poor task persistence, low frustration tolerance, inattention, easily distracted, doesn't follow direction, reckless behavior and sometime excessive motor activity.

The health and developmental history used in school systems will vary from a one page simple questionnaire from the school nurse to a ten page interview process. One of the most thorough developmental history forms is the *ANSER* System. *ANSER* is the acronym for *Aggregate Neurobehavioral Student Health and Education Review* by Melvin D. Levine, M.D. and it is published by Educators Publishing Services, Inc. The ANSER System can be given to the parent to fill out, although it will be too complicated for many parents; it is probably better utilized as an interview form that the school psychologist or the school nurse can use directly with the parent(s).

It really doesn't matter what form you use as long as you have included a section that asks parents to indicate whether or not early ADD symptoms were present. The form used in my school district includes a page (figure 5) simply added on to typical health and developmental history form which ordinarily is given to the parent to complete as part of the team assessment process. Again, even with this form it is sometimes necessary to interview the parent directly.

ADD symptoms: (birth to school age)	items to be included in a health and developmental history

Behavior problems noted by parents at home from an early age: Please circle YES or NO.

•	*High fetal activity during pregnancy*	*NO*	*YES*
•	*Fighting*	*NO*	*YES*
•	*Overactive*	*NO*	*YES*
•	*Destructive*	*NO*	*YES*
•	*Lies*	*NO*	*YES*
•	*Doesn't listen*	*NO*	*YES*
	Steals	*NO*	*YES*
•	*Distractible*	*NO*	*YES*
•	*Unable to finish simple tasks*	*NO*	*YES*
•	*Temper Tantrums*	*NO*	*YES*
•	*Easily Frustrated*	*NO*	*YES*
	Emotionally Unstable	*NO*	*YES*
	Withdrawn	*NO*	*YES*
•	*Impulsive (yells out, does dangerous things)*	*NO*	*YES*
•	*Short attention*	*NO*	*YES*
	Moody	*NO*	*YES*
•	*Sleep Disturbance*	*NO*	*YES*
	Bowel or Urine Problems	*NO*	*YES*
•	*Feeding problems*	*NO*	*YES*
•	*Clumsy*	*NO*	*YES*

If any of the above behavior problems were noted at home before the age of 5, please indicate which problem still exists at home and or school.

____

____

____

____

• ADD symptoms

Figure 5. Example form added to a health history

2. TOOL SCHOOL RECORDS:

Virtually every student has a cumulative record at school. If records are not available from past schools or incomplete, request these records from the previous school or schools. Pick out information that pertains to ADD symptomology:

- described as "immature"
- over-active, restless
- poor work habits
- poor social behavior
- doesn't listen; doesn't follow directions
- learning problems
- needed special help
- described as distractible and inattentive
- referred for special education assessment because of ADD symptoms
- consistent pattern of symptoms reported since kindergarten or first grade

As with the developmental history, the true ADD child will demonstrate symptoms consistently with each new teacher. We are looking for evidence of the *pervasive* nature of ADD from available historical records. A true attention disorder is a pervasive condition even though it may be "situational". For example, a child who exhibits symptomatic behavior only at school (and not at home) will exhibit those problem behaviors consistently at school.

The school psychologist is solely responsible for gathering information from school records and documenting this information in the psychoeducational report.

3. TOOL CLASSROOM OBSERVATIONS

Direct observation of the child in the classroom can yield valuable information regarding how the child operates in a larger group or it can be a waste of time. The primary purpose of having the school psychologist or any member of the assessment team to observe the problem student in the classroom would be to validate what the teacher has already reported about the child; and, with only a few exceptions, the teacher is usually an accurate reporter of classroom behavior.

Unless a child is obviously hyperactive, (i.e. out of seat 10 times in one minute, climbing on table, frequent talk outs, etc.), the classroom observation is one of the least productive methods of gathering information about the child. To observe a child all day long is not practical and the 20-30 minute observation that is practical often doesn't provide the true picture of the child over the course of an entire day. Nevertheless, there are a few practical methods for making an observation of a child with ADD symptoms that warrant mention here.

A. The Standard Approach: The school psychologist does a twenty minute observation of the child in the classroom. The observer makes anecdotal notes on classroom observation form. (See Appendix, Observation Report) and we now have documented evidence of the child's classroom behavior and that some professional has observed it.

B. The Interval Approach: The school psychologist or designated observer could do two to three 10-minute documented observations at various (random) intervals during the school day.

C. The "high tech" approach: With this method we set up a video camera on a tripod in the corner or up on a shelf or cabinet. The school psychologist who wants this observational record should make arrangements with the teacher and set up the equipment at a scheduled time - usually when students are not in the room, e.g., before school, recess or lunch time. The video camera method of classroom observations has some definite advantages over other methods: 1) record of observation to view later; 2) no observer needed in classroom; 3) if desirable, a parent that needs convincing of what the problem is all about can be shown the evidence , and; 4) we can obtain at least an hour of observation and speed review it, or if the teacher reports that the child did not display his usual behavior, then we can trash it and do another video observation.

D. Precision observation systems: Technical observation systems that differentiate specific student behaviors and/or code precise student-teacher interaction (e.g., PASS and CLASS by CORBEH, see reference in Bibliography) can be used in classroom observation. Although available, the use of elaborate classroom observation systems are really not necessary for observing the ADD student unless we are doing technical research.

On a diagnostic level, there have been several investigations concerned with determining the efficiency of teacher ratings compared to direct observation systems. Greenwood et al (1976) presented a fairly comprehensive review of the literature of these investigations and concluded that teacher judgment in ratings and estimates of behavior frequency were quite convergent with observation systems. The available evidence on the validity of teacher judgment of child behavior as determined by criterion measure of child behavior is impressive. The studies reviewed indicate that criterion measures including external measure of behavior disturbance (Walker, 1970), behavioral observation data (Nelson, 1971; Johnson and Bolstad, 1973) and reading achievement (Jones and Cobb, 1975) all validate the teacher's judgment and skill in evaluating child behavior. These data further suggest that teacher judgment could be a very important, valid and cost effective component of an overall screening process designed to identify children experiencing behavior problems (Greenwood, et al, 1976). This conclusion would suggest that even at a diagnostic level where the specifics of behavior are required, retrospective teacher ratings and estimates will do the job and that extraneous observation systems are superfluous.

4. TOOL DIRECT OBSERVATION IN TESTING: Like it or not, the school psychologist is perceived as the one who individually tests childrens' abilities, achievement and "processing" skills to determine if they have learning disabilities.

A child's behavior in the testing situation is often very revealing and in the course of one hour of one-to-one testing where the child is constantly being redirected to on-task behavior, the ADD student no matter how initially controlled, will start to demonstrate characteristic behavior. To a skilled psychologist, who directly test children, invariably it is the testing process that reveals more important information about the child than the test results themselves.

A. Inattentive behavior observed in testing. The symptoms of inattention may be inferred if the student demonstrates some of the following behaviors in testing:

1. Student is distracted by outside stimuli, e.g., noise in the next room,

poster on wall, blinking light on phone, etc.

2. Student mis-comprehends or doesn't understand the question with out repeating or rephrasing the question. Example: "How many things make a dozen?" Response: "eggs". With a repeat of the question or a non-standardized probe (e.g., "Okay, how may eggs are in a dozen?"). The student does know the answer but didn't seem to listen to the question when presented initially and this type of confusion is observed frequently during the course of testing.

3. Some students will try to avoid the task at hand by asking to leave testing (e.g., go to the bathroom, get a drink, go to lunch, recess, sharpen pencil, etc.) Most kids like to be tested individually or seem to enjoy the individual attention given to them in testing; however, the inattentive/distractible child doesn't respond to the testing situation the same way because you are requiring them to listen and pay attention--something they don't do well. We all avoid doing those tasks we don't do well. The ADD child frequently uses these avoidance tactics which reflects distractibility.

4. The student will demonstrate inattention by responding erratically to test and subject questions. Here the student misses easy items and is able to correctly respond to more difficult ones. The ability to understand a stream of oral information is very poor with an ADD students. As a rule, the level of comprehension through listening is seldom higher than thirty percent. This means that the ADD listener fully understands and retains only about one third of what he or she hears in the course of a school day. This deficit in auditory perception has nothing to do with the ability to hear. ADD Syndrome child usually hears well enough.

5. Rote memory and rote performance tasks are also very difficult for the inattentive student. Memory for digits as tested on the Digit Span subtest of the WISC-R is a task that probably more than 95% of true ADD experience difficulty with, i.e., results below average or weak in relationship to other tested abilities. Therefore, for the ADD student, rote short term memory often appears to be impaired. Students with learning disabilities also frequently have memory deficits on the basis of test results. A memory deficit doesn't mean that a child has ADD, but it seems as though almost every child with true ADD symptoms has a tested memory deficit or a relative weakness. The Coding subtest of the WISC-R is an example of a rote performance task that requires concentration and close attention for a two-minute visual motor task. Often the young ADD child (ages 6 to 9) will have problems with Coding, i.e., results below average or weak in relationship to other tested abilities.

B. Impulsive behavior observed in testing.

The symptoms of impulsiveness may be inferred if the student demonstrates some of the following behaviors and responses in the testing situation:

1. Impulsivity is indicated when a student seems to act before they think. A question from the Information Subtest of the WISC-R: "How many days are there in a week?" An impulsive response might be "100" or "Monday". Sometimes further (non-standardized) probing (e.g., "Name the days of the week?" "Good, okay now,

tell me how many days are there in a week?"). An observer in this situation may notice that the student with a little extra prompting could actually deduce or "think" of a correct response while their initial impulsive response may have been absurd.

As an aside, there is one specific prompt that has proven to be useful to see if the student can think more clearly or give a more accurate response: "Think again" is a positive response that an examiner can give to an absurd student response when it appears that the student does or should know the information that is being tested.

2. The verbal subtests of the WISC-R that are more likely to elicit impulsive responses are noted on Arithmetic, Comprehension and Information. With the verbal subtests, "weird" responses may be due to inattentiveness and/or impulsiveness sometimes it's impossible to tell what caused the weird response, i.e., did the student fail to comprehend the question (inattentiveness) or did the student fail to think before they respond (impulsiveness); nevertheless, both causes represent symptoms of ADD.

3. In the actual testing situation the problems of impulsiveness can often be more readily observable in response to performance type tasks. For example, the performance subtests of the WISC-R are visual tasks that require manipulative responses. The impulsive student will have difficulty keeping their hands off the materials even when instructed to wait. A very impulsive child will literally grab material right out of the hands of the examiner. Most adults including even the most tolerant school psychologist will at least become mildly annoyed when a student starts to grab test materials.

The inference of impulsivity can also be made when a student responds to performance tasks (e.g., block design and object assembly) with a "trial and error" approach rather than a more thoughtful, insightful, analytical approach. Impulsivity and the trial and error approach seems to lead to what can be interpreted as lack of persistence. The ADD child often has difficulty staying on task, completing tasks and in general, being persistent. The Block Design and Object Assembly subtests of the WISC-R allows the examiner to observe a child's level of persistence. The ADD child will give up easily and fail to persist because their impulsive trial and error approach is extremely inefficient.

4. Frequently, impulsivity in testing is observed on other tasks such as arithmetic computation. An impulsive student doing a bunch of mixed math problems on paper (e.g., addition, subtraction, multiplication, etc.) will often fail to pay attention to "the sign" for each problem. Even though they may possess the skill, the impulsive kid will add when s/he should have subtracted.

5. Further examples of impulsive responses in testing are observed when a student seems to be in a hurry. The student will perform tasks in a hurried, careless manner. The *Bender Visual-Motor Gestalt Test* often produces sloppy responses from the impulsive youngster. The impulsive child does not take time to reproduce the geometric shapes carefully and accurately.

C. Hyperactive behavior observed in testing.

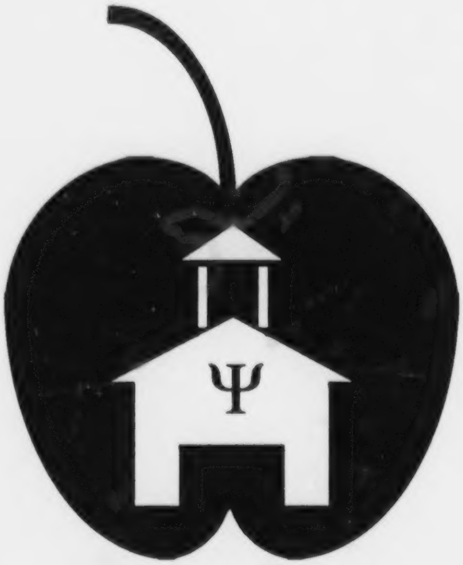
Hyperactive behavior involves excessive movement of the body or parts of the body. The range of activity can be mild, moderate or severe. Examples of hyperactive behavior in testing:

- squirming and fidgety in chair
- out of seat
- standing during testing
- sliding in chair
- kneeling in chair
- feet up on back of chair
- climbing up on table
- lying on table
- shuffling feet
- sweeping arms across table
- talk out
- verbal diarrhea
- excessive movement of hand/arms and feet/legs
- tapping feet/hands
- humming, singing, "sound effects"
- etc.

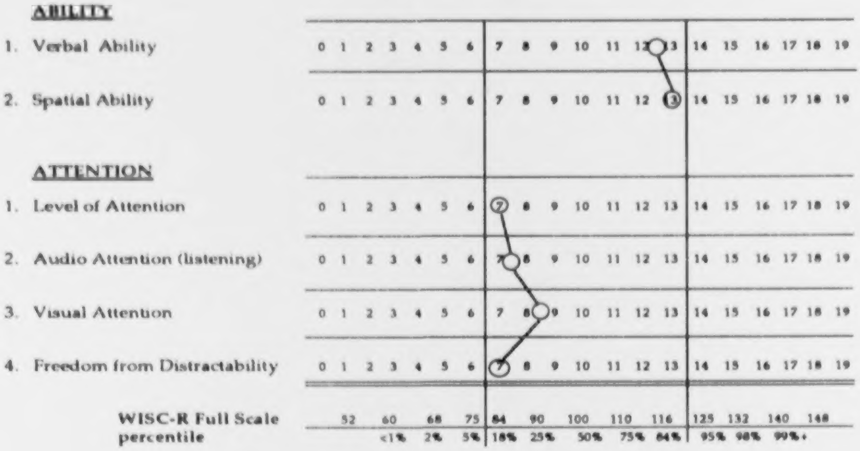
5. TOOL PSYCHOMETRICS:

If you are a veteran school psychologist, the probability is above the .01 level of confidence that you are familiar with the WISC-R and all the intricate meanings of the subtest scores. There has been a number of factor analytic studies which have factored out attention, concentration or freedom from distractibility as measured by specific clusters of scores (Lutey, 1977; Kaufman, 1975; Nichoson and Alcorn, 1979).

There are several WISC-R subtest combinations that provide quantitative assessment of the attention factors. Various WISC-R subtest combinations provide an examiner with an attention disorder profile if you want to go to the trouble of deriving the "attention scores". Many school psychologists are already familiar with the subtests that correlate with attention deficit and they get this information from inspection of the total WISC-R Profile. If you want to use the WISC-R Attention/Ability Profile to document psychometric evidence of attention disorder symptoms, simply duplicate the form in the Appendix, derive your scores and plot it on the profile. The profile can then be attached to your psychoeducational report.



The WISC-R Attention/Ability PROFILE



Derived Scaled Scores:

Ability Measures:

1. Verbal Conceptual Ability SIM + VOC ÷ 2 = 12.5
2. Spatial Ability PC + BD + OA ÷ 3 = 13

Attention Measures:

1. Level of Attention DS + COD ÷ 2 = 7
2. Audio Attention (listening) ARI + DS ÷ 2 = 7.5
3. Visual Attention PC + COD ÷ 2 = 8.5
4. Freedom from Distractability ARI + DS + COD ÷ 3 = 7

Use the scaled scores from the test results to obtain a derived scaled score which can be interpreted like an individual scaled score (M = 10; SD = 3). A spread of 3 points or more between derived scaled scores on the profile is considered significant.

The interpretation of the Attention/Ability Profile is left up to the judgment of the school psychologist and your expertise with psychometric data. As a rule of thumb approach, the writer looks for a significant spread (one standard deviation) of 3 points between the ability measures (i.e., factors 1 and 2) with any of the measures of attention or freedom from distractibility. Remember, any significant discrepancy between ability and attention scores represents only an indicator of potential symptoms or problems. These scores (like behavior rating scale scores) may only suggest the presence of symptoms; there is no information to be gained from these scores that can lead us to infer a cause. It should also be noted that the factors labelled "attention" coincide with factors labelled "memory" and differentiation is not always easily obtained. For example, other observations of score patterns among learning-disabled children include the so-called ACID pattern (Ackerman, Dykman, and Peters, 1976; Kaufman, 1979), which refers to the fact that learning-disabled children tend to do poorly on the subtests of Arithmetic, Coding, Information and Digit Span. Learning-disabled children also frequently perform more adequately on the triad of Picture Completion, Block Design, and Object Assembly, although finding any of these patterns in the profile of any particular child may be viewed more as suggestive of the child's problems rather than definitive in diagnosing the child as learning-disabled or attention disordered.

There have been a number of recently developed test instruments that claim validity as measures of the attention factor. A few of the more well known attention tests are briefly described here.

The Continuous Performance Test (CPT). The CPT is a performance test that purports to measure attention and impulsivity by use of a computer program (Apple computer, Lindgren and Lyon, 1983; IBM computer, Conners, 1989). The CPT requires the child to press either the mouse or keyboard when a specific sequence of letters appear (e.g., an orange H followed by a blue T). The target sequence appears at random intervals 10 times per each trial of 100 letters. Two types of error scores are derived: *omission errors* represent failure to respond to the target which is an indicator of selective attention/memory; *commission errors* involve response to stimuli other than the target which is an indicator of impulsivity. There are norms for regular education students in grade 1 through 6.

GFW Auditory Selective Attention Test (GFW; Goldman, Fristoe and Woodcock, 1974). Part of the Goldman-Fristoe-Woodcock Auditory Skills Battery, the test presents a word on the tape recorder and the child selects a response from four stimulus pictures. Competing noise is introduced approximately 10db below the stimulus word and increases to 10db above the stimulus.

The Detroit Tests of Learning Aptitude-Primary (1986) is an adaptation of the Detroit Tests - Revised (Hammill, 1985). The DTLA-P, designed to assess learning aptitude of children ages 3 through 9. There are eight subtests that make up the DTLA-P; there are two subtests for each of the four domains; linguistic; cognitive, attentional and motor. The subtests that measure the attentional domain are called Attention Enhanced (short term memory) and Attention Reduced (long term memory). Since the DTLA-P goes down to the 3 year level, it might be a useful instrument to use with younger children or when the WISC-R is inappropriate.

The Gordon Diagnostic System (GDS)

The GDS consists of two game-like tasks presented on a small computer-like machine (micro computer). One task is a continuous performance test. The other task, designed to measure impulsivity, requires the child to wait for several seconds between responses. Test results are compared to age level standardized norms.

A recent research study by Sutter, Bishop and Battin (1987) used the WISC-R (ARI, DS and COD) freedom from distractibility factor previously factor analyzed by Kaufman (1975) to help differentiate an ADD sample of 7 to 10 year olds from a non-ADD sample of the same age group. Also included in the test battery were the memory subtests from the ITPA, the attention subtests of the Detroit Tests of Learning Aptitude and the GFW Auditory Selective Attention Test (Goldman, Fristoe and Woodcock, 1974). There were very significant differences between the ADD sample and the non-ADD sample to the extent that 75% of the children were accurately differentiated strictly on the basis of the test results. The results support the position that ADD is a valid entity and that specific measures of attention can add objectivity to the process of ADD diagnosis. Again, it must be emphasized that test results can only validate the presence of symptoms of ADD. The actual diagnosis of an attention disorder cannot be derived from test scores.

At present, we have no objective test (either psychological or medical) to diagnose ADD.

6. TOOL BEHAVIOR RATING SCALES:

Most school psychologists are familiar with various behavior checklists and behavior rating scales. Keith Conners, et al developed the Teacher Questionnaire and the Parent Questionaire (see Appendix for copy of each) to specifically gather an ADD symptom rating for any particular child called the Hyperkenesis Index (reference 1978). At present the Conners Scales are being revised to account for some of the changes in DSM diagnostic criteria over the past ten years. The 1978 Teacher Questionnaire and Parent Questionnaire will be described here because they continue to be widely used in both clinical and school assessment.

The Teacher Questionnaire and the Parent Questionnaire provide important information to the school psychologist in the diagnostic process when ADD is to be ruled out; however, these rating scales should never be used by themselves to diagnose true ADD. Many children will rate high on the Hyperkenesis Index by a teacher and/or parent but remember these symptoms can have various causes and our recommended treatment depends upon what we, as experts, determine to be the cause, i.e., emotional or physical.

In addition to the Hyperkenesis Index, there are other scales from the questionnaire that have normative data:

Teacher Questionnaire Scales

1. Conduct problems
2. Hyperactivity
3. Inattentive--passive
4. Hyperkenesis Index

Parent Questionnaire Scales

1. Conduct problems
2. Learning problems
3. Psychosomatic
4. Impulsive--hyperactive
5. Anxiety
6. Hyperkenesis Index

Both scales are somewhat disguised because only 10 items on each questionnaire pertain to what is called the Hyperkenesis Index. The parent and/or teacher is simply asked to rate the child on a 4 point scale (i.e., not at all to very much) for a bunch of behavioral items which may or may not relate to ADD symptoms.

The following procedures are used in the interpretation of the Teacher and Parent Questionnaire. The parent and teacher are asked to complete the questionnaire. The questionnaires are self-explanatory and no real instructions are necessary except to tell them to respond to "all" items (don't leave any blank") as the best estimate they can make.

Once the school psychologist has received the completed questionnaire from parent and/or teacher, which usually takes less than 5 minutes to complete, it is "scored" for the Hyperkenesis Index. There are other scales as mentioned earlier which can be scored from the questionnaire which might also be useful. (see Conner's Rating Scale Profile in Appendix)

To score the Parent and Teacher Questionnaire for the Hyperkenesis Index, simply assign a number score to each of the ten items that make up the parent and teacher questionnaire.

46

Parent Questionaire Items:
4, 10, 11, 13, 19, 25, 30, 31, 33, 37

Teacher Questionnaire items:
1, 3, 7, 8, 14, 15, 21, 22, 26, 28

The total Hyperkenesis Index score is the raw score sum for each item.

O for "not at all"
1 for "just a little"
2 for "pretty much"
3 for "very much

Now we have 2 raw scores; one from the parent questionnaire and one from the teacher questionnaire. For each, the highest score is 30 and the lowest is 0. We can interpret the score in two ways:

1. "Rule of Thumb approach"

For most students who were rated by parents and teachers a raw score of 6 was found to be about average with one standard deviation being about 5 or 6. Therefore, a raw score on either the parent or the teacher questionnaire of 17 or 18 or higher would rate a child approximately in the upper two percent of the population as one demonstrating ADD symptoms. •Note that a raw score of 6 is average showing that to some degree most kids demonstrate some distractibility, impulsiveness, etc. The ADD kid demonstrates a lot of the symptoms -- he's not normal.

2. Technical psychometric approach

This method is technically more precise but whether it is more meaningful may be debatable. It depends upon your level of obsessive-compulsivity as a school psychologist.

In this method you calculate the exact Hyperkenesis Index score by taking the Hyperkenesis Index raw score and dividing it by 10 (i.e., the number of items in the index). For example, you have an 8-year old child with a teacher rating of 15; a raw score of 15 would yield a Hyperkenesis Index of 1.5. Now take your 1.5 score and look at Table 2 in the article by Goyette, Conners and Ulrich (1978). To compare a 1.5 to 8 1/2 year-old males in the norm group for the teacher's questionnaire, look for the appropriate groups (males by age), now on category (6-8 year olds) and factor (Index) which is the last column in Table 2. In this case, the mean score for boys 6-8 is .58 and the standards deviation is .61. To be at or above 2 SD would require an Index score of (.58 + 1.22) 1.80 which is very close to the rule of thumb approach, i.e., raw score of 18.

The new published edition of the Conners Rating Scales now uses a profile format similar to one developed by the author (see Profile forms in Appendix). For ease in interpretation, use the raw scores obtained for each scale and circle the number on teh appropriate profile (e.g., Teacher Questionaire Profile for Boys, Parent Questionaire for Girls, etc.). The results are interpreted in terms of percentile estimates for each scale, including the "ADD Index" previously referred to as the Hyperkinesis Index.

The Conner's Rating Scales have been used extensively in the past twenty years for hyperactivity research and for clinical assessment. These behavior rating scales formerly called the Teacher Questionnaire and the Parent Questionnaire have been used for diagnostic information in ADD assessment and for evaluation of treatment effect, especially to evaluate the effects of medication.

There are now (1989) two teacher rating forms, CTRS-28 and CTRS-39, and there are two parent rating forms, CPRS-48 and CPRS-93. The short version of the parent rating scale (CPRS-48) and the short version of the teacher rating forms were formerly called the "Parent Questionnaire" and the "Teacher Questionnaire". The Conner's Rating Scales are now (1989) published by

Multi-Health Systems, Inc.
908 Niagara Falls Blvd.
North Tonawanda, New York
14120-2060

A new scale which may also be helpful in analyzing classroom behavior is the ADD Comprehensive Teacher Rating Scale (ACTeRS), developed by researchers at the University of Illinois Institute for Child Behavior and Development. This scale was standardized by administering it to teachers of over a thousand public school children in kindergarten through fifth grade.

The ACTeRS allows for separate examination of four areas of child behavior: attention, hyperactivity, social skills, and oppositional behavior. The questions concerning Attention Scale are reproduced in Figure 6.

The Attention sub-scale from the ADD-H: Comprehensive Teacher's Rating Scale (ACTeRS)*

Behavior item	ALMOST NEVER			ALMOST ALWAYS	
1. Works well independently	1	2	3	4	5
2. Persists with task for reasonable amount of time	1	2	3	4	5
3. Completes assigned task satisfactorily wth little additional assistance	1	2	3	4	5
4. Follows simple directions accurately	1	2	3	4	5
5. Follows a sequence of instructions	1	2	3	4	5
6. Functions well in the classroom	1	2	3	4	5

Add all numbers circled above
and place total here.. Attention ________

* ACTeRS was developed by Rina K. Ullman, M.Ed., Esther K. Sleator, M.D., and Robert L. Sprague, Ph.D. Copyright (C) 1986, 1988 by MetriTech, Inc., 111 North Market Street, Champaign, IL. (217) 398-4868. This portion of the ACTeRS has been reproduced by permission of the copyright holder.

Figure 6. The Attention sub-scale from the ADD-H: Comprehensive Teaching Rating Scale (ACTeRS)

Because the authors of this scale believe that inattention is the primary disability in ADD, their scale was designed to put emphasis on attention. For diagnostic purposes, the authors believe that a poor score on attention is essential for a child to be diagnosed as having ADD. For girls, a score of 17 places the child just below the 20th percentile. For boys, a score of 15 places the child below the 20th percentile, and a score lower than 13 places the child below the 20th percentile.

The authors state,"If the score is at the 20th percentile or below, no matter what the other scores are, one can confidently feel the diagnosis of ADD is legitimate." If the score is between the 10th and 25th percentiles, the child may warrant a diagnosis of ADHD, depending on his other difficulties. Of course, these statements are patently absurd.

As a practicing school psychologist, the writer has had experience with the use of the Conners Scale and the ACTeRS Scale. The ACTeRS seems to be an adequate rating scale when used with other assessment tools, but it is not a test for ADD. **A diagnosis of ADD or ADHD cannot be made on the basis of the teacher rating on the ACTeRS Scale, the Conner's Scales or any behavior rating scale.**

Another recently developed set of rating forms which may be useful in detecting children with ADD in school age populations is the Child Behavior Checklist (Achenbach, 1988). This is easily administered and scored as part of a routine clinical evaluation and includes both a social competence section and behavior problem items. Parallel versions for parent and for teacher are available, with norms for boys and girls separately in age ranges 4-5, 6-11, and 12-16 years. Child Behavior Profiles consisting of factor analytically derived behavior problems scales can be obtained from the parent form on boys and girls in the three age ranges, and currently for 6-11 year old boys from the teacher form. Each of the profiles includes factors which are relevant to ADD. The teacher profile reliably distinguishes psychiatrist diagnosed boys with ADD from other clinically referred boys, with ADD boys scoring higher on the Inattentive scale. Boys who have been clinically diagnosed as ADD-H score higher on the Nervous-Overactive scale than those diagnosed ADD without Hyperactivity (Edelbrock, Costello, & Kessler, 1984).

The above mentioned behavior rating scales are probably the most practical instruments to use in the school setting; especially the Conners Scales and the ACTeRS. A few other behavior rating scales worth mentioning include The School Situation's Questionnaire and the Home Situations Questionnaire (Barkley, 1981); The Revised Behavior Problems Checklist (Quay and Peterson, 1987); The Attention Deficit Disorders Evaluation Scale (McCarney, 1989); The Behavior Rating Scale for Children (Kendall and Wilcox, 1979); and the SNAP Checklist by Swanson, Logen and Pelham.

There are some questionnaires and behavior scales that do not use quantitative data nor reference to norms. These questionnaires use qualitative information about specific symptoms of ADD; one example included here is the Monterey Questionnaire (Morriss, 1988).

THE MONTEREY QUESTIONNAIRE

Student: ______________________________

Date: ________________________________

Please rate the degree of each behavior for this student.

		NOT AT ALL						VERY MUCH			
1.	Fidgety/squirmy	1	2	3	4	5	6	7	8	9	10
2.	Out of seat	1	2	3	4	5	6	7	8	9	10
3.	Easily distracted	1	2	3	4	5	6	7	8	9	10
4.	Difficulty waiting turn	1	2	3	4	5	6	7	8	9	10
5.	Blurts out answers	1	2	3	4	5	6	7	8	9	10
6.	Difficulty following instructions	1	2	3	4	5	6	7	8	9	10
7.	Difficulty staying on task	1	2	3	4	5	6	7	8	9	10
8.	Fails to finish work	1	2	3	4	5	6	7	8	9	10
9.	Difficulty playing quietly	1	2	3	4	5	6	7	8	9	10
10.	Talks excessively	1	2	3	4	5	6	7	8	9	10
11.	Interrupts and butts in	1	2	3	4	5	6	7	8	9	10
12.	Difficulty in listening	1	2	3	4	5	6	7	8	9	10
13.	Loses things/disorganized	1	2	3	4	5	6	7	8	9	10
14.	Impulsive (does dangerous things)	1	2	3	4	5	6	7	8	9	10
15.	Work habit problems at school	1	2	3	4	5	6	7	8	9	10
16.	Social Behavior problems at school	1	2	3	4	5	6	7	8	9	10

Figure 7. The Monterey Questionnaire is a qualitive device to assess the presence of ADD symptoms.

The above questionnaire was developed by the author as an informal behavior rating scale that either parents or teachers could complete. There are no norms but the severity of symptoms (DSM III-R) can easily be determined. This form can be duplicated from the Appendix if you so desire.

7. **TOOL** RESPONSE TO "TRIAL" BEHAVIORAL INTERVENTIONS:

The last diagnostic tool described here should be considered optional or experimental in the diagnostic process. Behavior management strategies which use specific incentives to motivate students to stay on-task are often used with students who exhibit symptoms of ADD as an early intervention. The use of incentives as part of a behavior management treatment for the ADD student does not work as well as it does for a "normal" or non-ADD student. That is, incentives are not as effective in helping an attention disordered child stay on task because these students simply lack the self-control to do so. If the above statements are accurate, and they probably are, then the "trial" use of incentive programs would be a test of a student's self control.

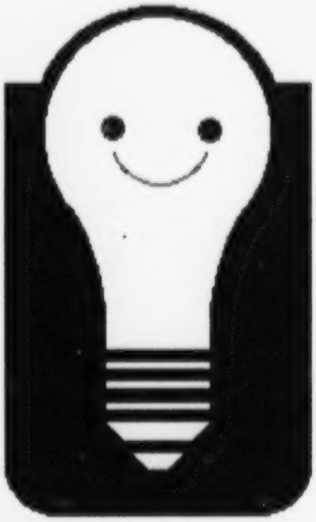
There are two methods that can be easily implemented by the school psychologist to assess a student's response to incentives:

1. The first method is a test-retest procedure used directly by the school psychologist in testing. The object of this procedure is to assess the effects of incentives with a particular student with on-task behavior. Do incentives work to keep a child on a brief task like the Coding subtest of the WISC-R which requires sustained attention to a visual-motor task for two minutes? If a child seems to do poorly on Coding (or any other subtest) due to inattention or distractability, the school psychologist could simply retest later and use incentives (e.g., stickers, stars, desired activity, etc) to determine how much improvement can be made with this intervention. Most children who have serious attention problems do not improve their performance appreciably. If a child does perform significantly better on the retest procedure, then we can conclude that incentives do work on a brief task for this child. We then need to know if the child can perform for longer periods on-task (with incentives) in the classroom setting.

⬇

2. Method two attempts to assess the effects of incentives with on-task or task completion in the classroom. This may be a very clever way of getting a teacher to "try" a behavior intervention with a particular child. The school psychologist suggests to the teacher that "we test the child's response to incentives over a two week period." You can honestly state that most children with serious attention problems don't respond well to incen- but we should test for it with a simple behavior management strategy (see examples of some simple behavioral strategies under the treatment with behavior management at school section starting on page 21.

Another way of assessing a student's response to incentives would be to use the Teacher-Student Agreement shown in figure 8.



TEACHER-STUDENT AGREEMENT

STUDENT______________ Date:________

TEACHER ___________________________

Earn one ☺ sticker for completing work on time accurately.
5 ☺ stickers possible daily

Incomplete work = no sticker

10 ☺ stickers earns a special privilege

Note: This is a two-week classroom test of this student's response to incentives. Use this agreement form and the stickers provided by the school psychologist to record all results:

1. Indicate start date on calendar.
2. Student or teacher places sticker on calendar date as the sticker is earned.
3. Record sticker earnings for 10 days only.
4. Teacher estimates before and after test work completion/accuracy for the student.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY

Teacher Estimates:

BEFORE AGREEMENT (Circle)						RESULTS OF 2-WEEK TEST					
% of work completed:	below 50	60	70	80	90	50	60	70	80	90	100
% correct:	below 50	60	70	80	90	50	60	70	80	90	100

Compared to class average, work was:	above average low well below	above average low well below

Figure 8. classroom test of a student's response to incentives

The Teacher-Student Agreement is actually an informal test completed in the classroom over a two-week or ten school day span of time. After two weeks, which can often be within the time between the assessment plan meeting and our post assessment meeting, we have collected this valuable assessment information from the classroom teacher. The classroom teacher, therefore, is part of the assessment team. It is interesting that teachers who agree to use this "test" in the classroom become more willing to use this kind of strategy or to continue the use of a behavioral management program when they see that it does seem to work. When the strategy does not work very well we have gained some valuable diagnostic information as well as information that will affect treatment recommendations.

Assessment of Attention Disorders:

There are three forms of assessement that utilize the seven diagnostic tools of the school psychologist in the process of evaluation of the child with ADD symptoms.

1. Historical assessment
2. Temporal assessment
3. Longitudinal assessment

Historical assessment refers to the interpretation of the data collected from a health and developmental history of the child. Historical assessment also refers to the interpretation of the data collected from school records. The developmental history is a documented recollection of behavior (symptoms) and development as reported usually by a parent from birth to school age. The school records represent evaluative information about he child from the time of entry into school to the present in terms of anecdotal data, tests, grades and other information about behavior. The historical data is the most crucial information you will obtain in the diagnosis of ADD because it will confirm pervasiveness and the possible cause.

Temporal assessment refers to the present time evaluation of ADD symptoms. We use the other diagnostic tools, including observations, testing observations, test data and rating scale results. In temporal assessment, we evaluate the existence and severity of symptoms at the present time, but we cannot make any inferences about cause from this data. For example, a rating scale only gives us information about the existence of symptoms; it does not give us a clue about a cause or tell us that the child has a true attention disorder.

Longitudinal assessment incorporates the historical and temporal assessment over time using the seven diagnostic tools along with information about treatment effects. Although in a general sense, this form of assessment is how all students are evaluated in school, we use longitudinal assessment with students in special education programs. The longitudinal assessment process can be especially appropriate for the child with ADD symptoms when we are unsure of the cause, as may often be the case with Types 3 and 4 (i.e., inattentive, passive ADD and pseudo ADD). Sometimes we need to assess the child with symptoms of an attention disorder over time when we are unsure of the cause. The longitudinal assessment process for an ADD child would involve the evaluation of the least restrictive forms of treatment (i.e., classroom strategies, diet management, parent training, behavior management, etc.); if these treatments seem to work on the basis of our evaluation, then we would probably recommend that they continue and that we also continue to "monitor" the student. On the other hand, if the less restrictive treatment(s) do not seem to be effective, we may need to recommend more restrictive forms (i.e., medication, special education, counseling, etc.). All of the various forms of treatment for attention disorders will be discussed more fully in Chapter 4.

Diagnosis of ADD: concluding remarks

It must be emphasized that an accurate diagnosis of any disorder is important because it is a prerequisite to appropriate treatment. If appropriate treatment(s) can be delivered, then the likelihood of a favorable outcome is increased. The child with attention problems, and associated symptoms, possess a unique challenge to the school psychologist. For the student with attention problems the school psychologist must attempt to answer two fundamental questions as a result of the diagnostic process:

1. What is the cause?

2. How bad is the problem?

There is no specific test to answer these questions, but a school psychologist has access to tools that can help provide the answers so that accuracy in diagnosis can be achieved.The four types of ADD differentiated in this handbook include:
(1)Hyperactive-Aggressive, (2) Mixed, (3) Inattentive-Passive, and (4) Pseudo. A careful diagnosis within the school setting should distinguish these four types because they pose differential problems and differential treatments. In the case of Types 1 and 2, we are usually looking at fairly observable symptoms of an attention disorder with aggressivity (e.g., fighting, name calling, etc.) which is disruptive and aversive in a school setting; or with impulsivity (e.g., out of seat, talk outs, grabbing, pushing, etc.) which is at least moderately aversive in the school setting; or with hyperactivity, which can also be aversive because of the nature of the fidgety, restless and squirming behavior. Learning disabilities often associated with Types 1 and 2 also produce prominent problems that cause concern for these forms of ADD in the school and, in fact, are usually the main "reason for referral" in the first place. Surprisingly, the symptom of inattention by itself is not nearly as observable nor nearly as aversive or problematic within the school setting; therefore, the Type 3 condition of ADD is the most difficult to diagnose and treat because it is often not recognized for what it could be, i.e., an attention disorder due to a physiological cause. The inattentive-passive ADD student is often not referred for LD assessment and is simply viewed as unmotivated, lazy or spacey. A longitudinal diagnostic approach is sometimes needed with the Type 3 ADD student. The importance of diagnosis, especially with the ADD condition is to recognize the symptoms, document that the symptoms exist, and then try to answer the key question of what is the cause. If we can rule out emotionality (Type 4) as a primary cause (even though it may exist as a secondary symptom), then we have good reason to suspect a biochemical or neuro physiological cause for our symptoms and we can say that it is true ADD.

The Psychoeducation Report: The Role of the School Psychologist

Introduction:

The psychoeducational report is often the product of the school psychologist. It is a summary of the data collected by the multi-disciplinary assessment team integrated into one report, or it can be a group of reports from each specialist from the multi-disciplinary assessment team. The most effective and meaningful report is one where the school psychologist assimilates the information obtained from all the data sources and integrates that information into a single psychoeducational report.

The Monterey Model (MADAM, Figure 9), as discussed in Chapter 2, employs the multi-disciplinary assessment team approach to gather data just like the process of evaluation of a child suspected of having a learning disability. Simultaneously, the process of evaluation will also include procedures and data interpretation to rule out an attention disorder. This chapter will explore the process of evaluation as it is related to the psychoeducational report developed and produced by the school psychologist.

The diagnostic questions of ADD that need to be answered and documented

- Does the diagnostic information show evidence of ADD?
- Is there evidence of pervasive ADD symptoms in the health history and school history?
- How severe is the problem?
- What specific school problems are involved...such as learning problems, work habit problems, and/or social behavior problems?
- What seems to be the cause of the symptoms?
- Is this student eligible for special education? And, does this student need special education?
- What kind of recommendation can be made to help this student?
- Should this student be tried on medication or should we try all other treatments first?

THE MONTEREY ATTENTION DISORDER ASSESSMENT MODEL (MADAM)

Assessment Tool	Collection Process	Documentation
1. Development history	parent completes health and developmental history form	indicate in report positive ADD symptoms (if any) reported by parent during pre-school years.
2. School Records	school psychologist reviews cumulative record for anecdotal information or assessment of work habits and social behavior	indicate in report positive ADD symptoms (if any) reported or interpreted from the school history
3. Classroom observations	direct observations, teacher anecdotal records or behavior rating of student's classroom behavior	indicate in report positive ADD symptoms (if any) noted in observation or reported by the teacher in the classroom.
4. Test observations	school psychologist record notes during testing regarding student behavior	indicate in report positive ADD symptoms (if any) noted in observations during testing.
5. Psychometric data	school psychologist tests and derives attention problem profile	indicate in report positive ADD symptoms (if any) derived from the test results.
6. Behavior rating scales	teacher completes rating scale; parent completes rating scale	indicate in report positive ADD symptoms (if any) obtained from rating scale scores.
7. Behavioral intervention effect	Assess the effect of incentives on student behavior a. School psychologist test-retest method b. Teacher assesses classroom behavior changes due to intervention.	indicate in report student's response to incentives used in testing and/or class room.

The Psychoeducational Report

The psychoeducational report is nothing new to a school psychologist, who has a role in the assessment process, but it is important to emphasize that the psychoeducational report is a meaningful document in the process of diagnosis and treatment of the attention disordered student. The psychoeducational report for the ADD student is not different than for the student with a learning disability and often these reports are one in the same. While school psychologists may vary in their style of report writing, the essential content areas of a good report should at least include the following essential elements.

Essential Elements of the Psychoeducation Report

REASON FOR REFERRAL: Include ADD symptoms reported by the teacher (or the parent) as they are related to school problems of academic skill deficits, work habit problems, and/or social behavior problems. Include here specific symptoms that prompted the teacher (or parent) to request the assessment of this particular student in the first place.

BACKGROUND INFORMATION: In addition to other pertinent background information about the student, include here information regarding evidence of ADD symptoms as reported by the parent in the health and developmental history. It is also essential to report here any historical information about the student which was noted or interpreted from the school records (cumulative file).

OBSERVATIONS: If available, include an anecdotal report, usually in a narrative form, about observed classroom behavior. Specific symptoms of inattention, impulsivity and/or hyperactivity should be described in terms of observed behavioral correlates (e.g., out of seat, talk outs, time on-task, constantly seeking help, can't work independently, doesn't follow directions and poor at listening)

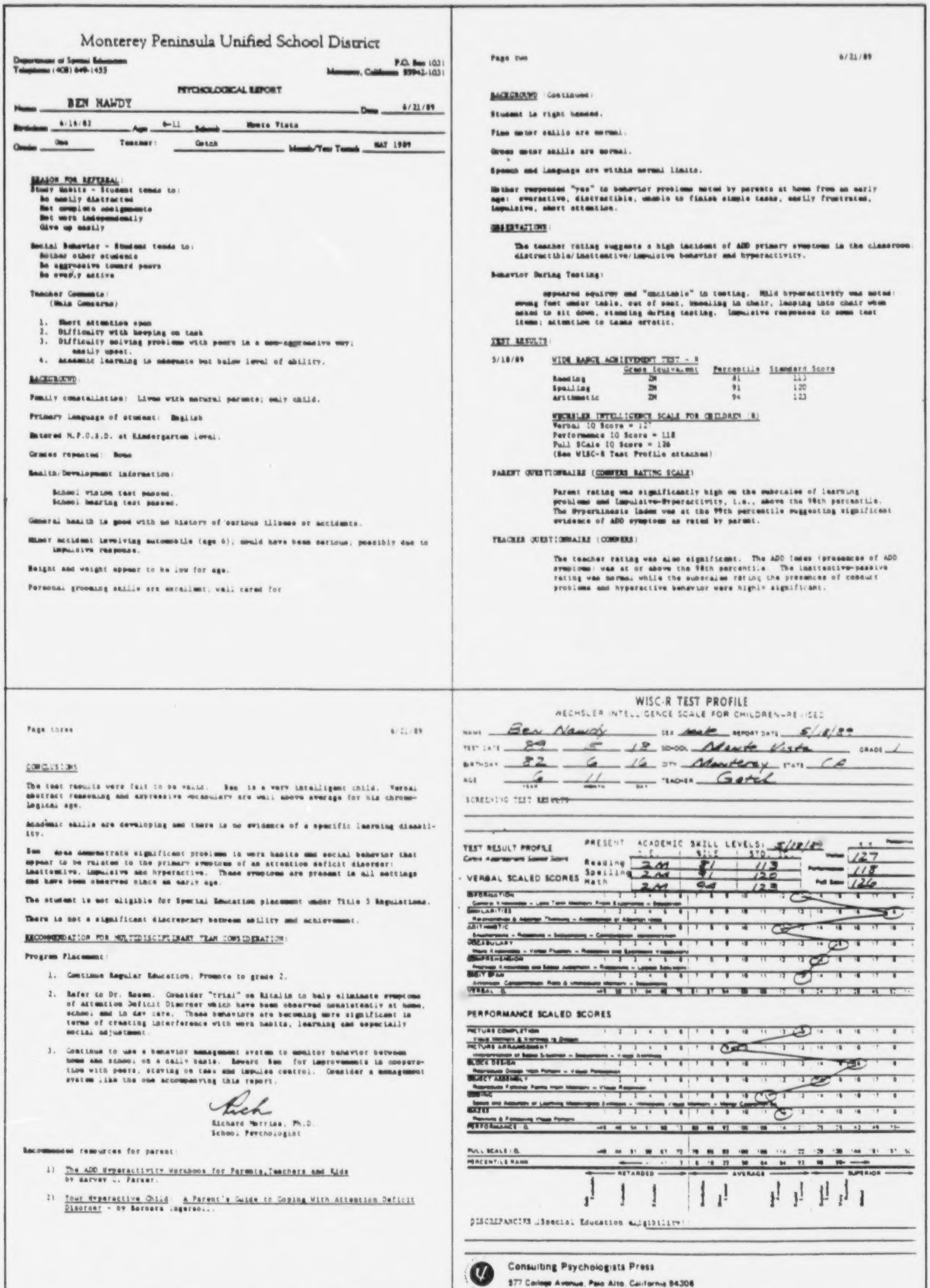
Observations in testing would include descriptions of behavior noted in the interview and during testing, usually in regard to excessive motor activity (hyperactivity) if noticed, as well as impulsivity (e.g., grabbing, trial and error approach to tests, careless errors, erratic performance, etc.). Also note signs of distractibility and inattention that might be related to the need to repeat questions, rephrase questions, redirect the student, miscomprehension, etc.

TEST RESULTS: The psychometric data is usually simply listed with the name of the test and the quantitative results. The type of tests might include the following: ability, achievement, perceptual-motor, speech, language, adaptive scales and/or behavior rating scale.

CONCLUSIONS: This section of the report is devoted to the interpretation and discussion of the data collected through observation, other reports, history and test results. For the school psychologist, the scores are often interpreted in terms of special education eligibility criteria. The student with a suspected attention disorder should be discussed with regard to problem symptoms, the severity of the problem, the success or failure of previous interventions and the possible relationship between ADD and LD symptoms. A diagnosis of the problems should be made here in the conclusion. The diagnosis should be supported by the evidence.

RECOMMENDATIONS: This part of the psychoeducational report is typically devoted to special education program placement based upon eligibility criteria. For the ADD child we need to make specific treatment recommendations which might include one or more of the treatments discussed in detail in Chapter 4. If medication is being considered as a possible treatment choice, I believe that a direct, affirmative statement should be made regarding this recommendation, e.g., "This student was referred to his pediatrician, Dr. Smith, to be considered for a trial on medication to help manage symptoms of an attention disorder".

An example report is shown in Figure 10 which contains the essential elements of the psychoeducational document. This is an example report, not necessarily an exemplary one. It documents the symptoms of ADD using the tools of the Monterey Attention Disorder Assessment Model (MADAM). It is particularly important to document as much evidence as possible in this case because a medical referral is being considered. It is probably a good idea to be fairly thorough in your description of problem behaviors and symptoms as they are related to ADD because even if a medical referral is not being considered at the time of assessment, it could be a possible recommendation in the future-as in the situation I call longitudinal diagnosis. A school psychologist can establish baseline pervasiveness of this disorder by proving that the symptoms have been there in the past. Remember, the ADD student doesn't always outgrow these problems; there's only about a 50-50 chance that they will.



Monterey Peninsula Unified School District

Department of Special Education
Telephone (408) 649-1435

P.O. Box 1031
Monterey, California 93942-1031

PSYCHOLOGICAL REPORT

Name: BEN NAWDY   Date: 6/21/89

Birthdate: 6/16/82   Age: 6-11   School: Monte Vista

Grade: One   Teacher: Gatch   Month/Year Tested: MAY 1989

REASON FOR REFERRAL:

Study Habits - Student tends to:
Be easily distracted
Not complete assignments
Not work independently
Give up easily

Social Behavior - Student tends to:
Bother other students
Be aggressive toward peers
Be overly active

Teacher Comments:
(Main Concerns)

1. Short attention span
2. Difficulty with keeping on task
3. Difficulty solving problems with peers in a non-aggressive way; easily upset.
4. Academic learning is adequate but below level of ability.

BACKGROUND:

Family constellation: Lives with natural parents; only child.

Primary language of student: English

Entered M.P.U.S.D. at Kindergarten level.

Grades repeated: None

Health/Development information:

School vision test passed.
School hearing test passed.

General health is good with no history of serious illness or accidents.

Minor accident involving automobile (age 6); could have been serious, possibly due to impulsive response.

Height and weight appear to be low for age.

Personal grooming skills are excellent; well cared for

Page two   6/21/89

BACKGROUND (Continued):

Student is right handed.

Fine motor skills are normal.

Gross motor skills are normal.

Speech and language are within normal limits.

Mother responded "yes" to behavior problems noted by parents at home from an early age: overactive, distractible, unable to finish simple tasks, easily frustrated, impulsive, short attention.

OBSERVATIONS:

The teacher rating suggests a high incident of ADD primary symptoms in the classroom: distractible/inattentive/impulsive behavior and hyperactivity.

Behavior During Testing:

appeared squirmy and "excitable" in testing. Mild hyperactivity was noted: swung feet under table, out of seat, kneeling in chair, leaping into chair when asked to sit down, standing during testing. Impulsive responses to some test items; attention to tasks erratic.

TEST RESULTS:

5/18/89   WIDE RANGE ACHIEVEMENT TEST - R

	Grade Equivalent	Percentile	Standard Score
Reading	2M	81	113
Spelling	2M	91	120
Arithmetic	2M	94	123

WECHSLER INTELLIGENCE SCALE FOR CHILDREN (R)
Verbal IQ Score = 127
Performance IQ Score = 118
Full SCale IQ Score = 126
(See WISC-R Test Profile attached)

PARENT QUESTIONNAIRE (CONNERS RATING SCALE)

Parent rating was significantly high on the subscales of learning problems and Impulsive-Hyperactivity, i.e., above the 98th percentile. The Hyperkinesis Index was at the 99th percentile suggesting significant evidence of ADD symptoms as rated by parent.

TEACHER QUESTIONNAIRE (CONNERS)

The teacher rating was also significant. The ADD Index (presences of ADD symptoms) was at or above the 98th percentile. The inattentive-passive rating was normal while the subscales rating the presences of conduct problems and hyperactive behavior were highly significant.

Page three   6/21/89

CONCLUSIONS

The test results were felt to be valid. Ben is a very intelligent child. Verbal abstract reasoning and expressive vocabulary are well above average for his chronological age.

Academic skills are developing and there is no evidence of a specific learning disability.

Ben does demonstrate significant problems in work habits and social behavior that appear to be related to the primary symptoms of an attention deficit disorder: inattentive, impulsive and hyperactive. These symptoms are present in all settings and have been observed since an early age.

The student is not eligible for Special Education placement under Title 5 Regulations.

There is not a significant discrepancy between ability and achievement.

RECOMMENDATION FOR MULTIDISCIPLINARY TEAM CONSIDERATION:

Program Placement:

1. Continue Regular Education; Promote to grade 2.
2. Refer to Dr. Rosen. Consider "trial" on Ritalin to help eliminate symptoms of Attention Deficit Disorder which have been observed consistently at home, school and in day care. These behaviors are becoming more significant in terms of creating interference with work habits, learning and especially social adjustment.
3. Continue to use a behavior management system to monitor behavior between home and school on a daily basis. Reward Ben for improvements in cooperation with peers, staying on task and impulse control. Consider a management system like the one accompanying this report.

Rich
Richard Morriss, Ph.D.
School Psychologist

Recommended resources for parent:

1) The ADD Hyperactivity Workbook for Parents, Teachers and Kids by Harvey C. Parker.
2) Your Hyperactive Child: A Parent's Guide to Coping With Attention Deficit Disorder - by Barbara Ingersoll.

WISC-R TEST PROFILE
WECHSLER INTELLIGENCE SCALE FOR CHILDREN-REVISED

NAME Ben Nawdy   SEX male   REPORT DATE 5/18/89
TEST DATE 89 5 18   SCHOOL Monte Vista   GRADE 1
BIRTHDAY 82 6 16   CITY Monterey   STATE CA
AGE 6 (YEAR) 11 (MONTH) (DAY)   TEACHER Gatch

SCREENING TEST RESULTS

TEST RESULT PROFILE

PRESENT ACADEMIC SKILL LEVELS: 5/18/89

	G.E.	%ILE	STD. SC.
Reading	2M	81	113
Spelling	2M	91	120
Math	2M	94	123

Verbal 127
Performance 118
Full Scale 126

DISCREPANCIES (Special Education eligibility)

Consulting Psychologists Press
577 College Avenue, Palo Alto, California 94306

Figure 10. Example Psychoeducational Report (also found in Appendix)

Treatment: The Role of the School Psychologist

Introduction

ADD is a very complicated childhood syndrome that has symptoms that can affect all the critical areas of school functioning: learning, work habits, social skills and self-esteem. ADD is a neurophysiological disorder for which there is no known simple cure. The current research in treatment supports the idea of individualized treatment combinations or multi-modal treatments (Satterfield, Satterfield and Cantwell, 1980). Medication for the ADD child should never be the only treatment recommendation; although, in general, it often appears to be a prerequisite treatment for all the other forms of treatment to be maximally effective.

After a child has been assessed by the multi-disciplinary assessment team (i.e., school psychologist, resource teacher, speech therapist, school nurse, etc.) we meet with the parent(s) or guardian(s) to discuss assessment findings and to make recommendations. This meeting is often called our IEP meeting or post-assessment meeting. The sequence of (1) Assessment Plan meeting with parent/guardian (2) Assessment by multi-disciplinary team, and (3) Post assessment meeting with parent/guardian is a fairly universal process throughout the schools in the United States. This process is, in fact, the vehicle for diagnosis and treatment of the ADD and LD child within the school setting.

Treatment of the ADD child

Treatment of the ADD child usually requires a multi-modal approach frequently involving a treatment team made up of parents, teachers, the school psychologist, physicians, and behavioral or mental health professionals. Various forms of treatment include the following:

A. Educational (School-based treatment)
   1. Generic classroom strategies
   2. Special education programs
   3. Behavior Management
   4. Counseling

B. Counseling (parent and child)
   1. Demystification
   2. Cognitive behavioral therapy (CBT)
   3. Parent support groups
   4. Social skills
   5. Behavior Management

C. Medical (pediatrician, psychiatrist, neurologist)
   1. Medication

    a. Stimulant (e.g., Ritalin)
    b. Anti-depressant (e.g., Trofranil)
  2. Diet management
    a. High protein breakfast
    b. Allergy control

D. Parent training (home-based)
  1. Behavior management
  2. Medical treatment management
  3. Home/school monitoring
  4. Diet Management
  5. Counseling
  6. Parent suport group

*I*f you look at the specific forms of treatments under each of the four general treatment categories, you will see that they overlap one another. In an attempt to simplify how each form of treatment is utilized from the school setting, I have broken down the various categories into seven distinct modes of treatment.

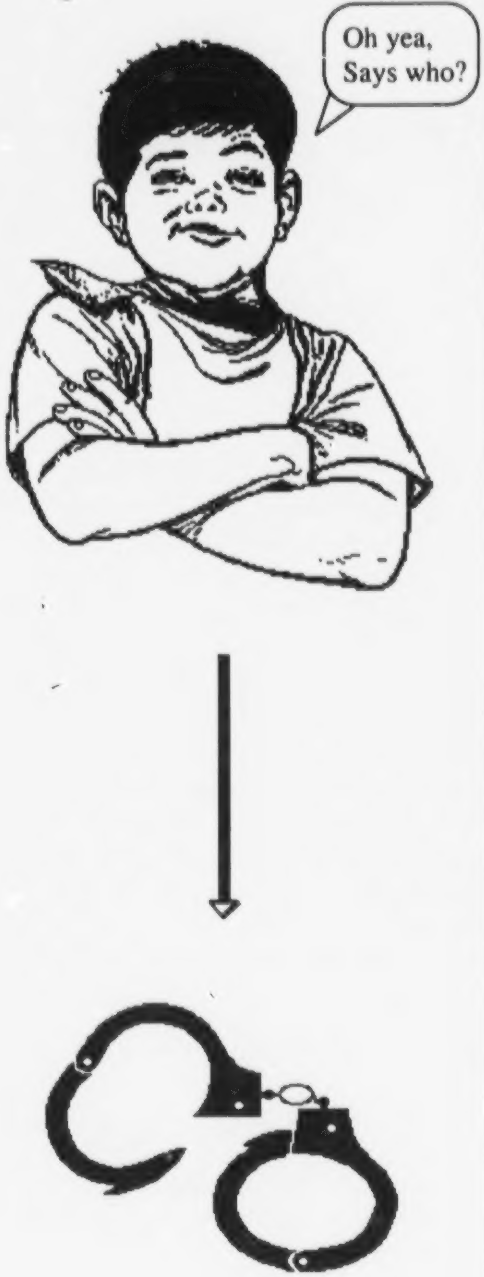
*T*he seven treatment options for the ADD child are listed below. All of these strategies will be discussed in detail as they relate to the role of the school psychologist as coordinator and facilitator in the treatment process.

TREATMENT FOR THE ADD STUDENT

- Generic classroom strategies
- Diet management
- Parent training
- Behavior management
- Counseling
- Medication
- Special Education

*T*he treatment decisions to be made depend upon a lot of factors that are specific to each case. One major factor seems to be the availability of treatments within a given school or community. Are there resources for family counseling, training in child management, special educational assistance, and follow-up support during development? What are these resources, are they affordable to the family in question, and how long will the family have to wait to receive them? Are the professionals providing the services both reputable and effective? The answers to these questions often influence the decision as to whether or not to recommend medication. Another issue influencing drug treatment is the educational and socioeconomic level of the parents and hence their amenability to non-drug treatments. Many forms of counseling and parent training require literate, well-motivated parents who can afford the services. When parents are relatively uneducated, are poor, and/or belong to a minority group, alternatives to medication may be severely limited, regardless of the fairness of the situation. Poor and uneducated parents also tend to view children's health and psychological problems in terms of dealing with crises rather than in terms of prevention. As a result, they are likely to seek help only after a child's problems have become quite serious and may only use treatments that temporarily reduce the "crisis". Thus, when such parents are encountered, medication may be the only viable approach or the only one the parents will utilize for their ADD child. Finally, the severity of a problem at the time of referral may dictate a need for immediate treatment that only medication can effectively provide.

Without appropriate treatment, ADD can cause school failure, rejection by peers and family turmoil, all of which can lead to developmental delays and psychiatric complications stemming from low self-esteem and frustration. The prognosis is particularly poor for those children that develop aggressive behavior in addition to the primary symptoms of ADD. The worst form of ADD (aggressive or Type 1) can often lead to oppositional, antisocial and criminal behavior.



STRAT EGIES

TREATMENT WITH GENERIC CLASSROOM STRATEGIES

The school psychologist should provide a classroom teacher with some general strategies for the classroom to aid the inattentive/distractable student. The student with chronic problems of inattenion needs individualized consideration and special treatment in order to function in a classroom setting. These strategies are designed to help the student learn as well as to help the teacher manage the child with problems of inattention. There's no question that hyperactive, inattentive, impulsive children can really disrupt a classroom.

Here are some common sense strategies for a classroom teacher (regular or special education) to consider. The school psychologist should have a menu of ideas to give to a teacher with a problem child. Give the teacher a simple list of strategies to facilitate learning and to help manage the ADD child. The list of teacher strategies on the next page can be given to the teacher in the post assesment meeting or can be attached to the psychoeducational report (assuming, of course, that the teacher will have read the report). Instruct the teacher to consider only some of these strategies that might fit in with their teaching style.

WHAT STRATEGIES CAN BE USED TO HELP THE ADD STUDENT?

The most effective treatment of ADD requires full cooperation of teachers and parents working closely with other professionals such as physicians, psychologists, psychiatrists, speech and educational specialists, etc. In the coordinated effort to ensure success in the lives of children with ADD the vital importance of the teacher's role cannot be overestimated. Dennis Cantwell, M.D. claims, "Anything else is a drop in the bucket when you compare it with the time spent in school."

A child with attention problems has the greatest difficulty in being able to narrow the focus of attention. S/he is like a camera with the lens wide open. Every stimulus streams into their awareness equally and simultaneously. Thus, s/he is the victim of an assault on their senses by everything in their vicinity, including color, sound, movement, confusion and emotionally charged situations. This child requires extra time to adapt to the myriad of sensations in a new experience. Consider some of the following generic strategies in helping the inattentive/distractible child learn more effectively:

1. **Simplify directions:** Expect the inattentive child to have difficulty following directions. Give directions one step at a time; these students have extreme difficulty remembering three-step directions. Give directions orally, visually (on the board) and have them write them down.

2. **Modify the task:** Shorten or break up the assignment so that it becomes manageable for the child.

- cut the assignment in half.
- only do the odd numbered problems.
- draw a line where to stop, etc.

Try to give feedback, and especially positive strokes, for attempting all the (modified) task upon completion of that segment of the task. Remember, these children need feedback more frequently by completing parts of a bigger task and appropriately asking for feedback upon completion of a segment.

3. **Structure their space**
   a. Reduce normal distractions for the inattentive child through the use of a 3-panel screen or study carrel or call it a "work corner". This space should not be used as a "time out". Offer the space as a privilege or something any student could try to help them concentrate and get their work done. It should not be used as a punishment.

   b. Define spatial boundries for the kid who is constantly "out of seat". To control out of seat behavior of a hyperactive child, use a visible tape on the floor around the student's desk. State the rule: "You can't go beyond the lines or you'll have to pay" (a response cost).

4. **When nothing seems to be working (especially the student) use your own plan:** Consider using a predetermined alternative activity when the child is particularly unfocused, e.g., errand to the office, lap around the playground, alternative task for 10 minutes, etc. The idea is to give the child a choice or a break from a difficult task, at least temporarily, and to prepare them to come back to that difficult task once the alternative has been accomplished--"When you come back, you'll be twice as ready to work again." And, please, try not to be sarcastic.

5. **Change the task more frequently:** Motor activities, especially, should be alternated with quiet intellectual ones. These children are restless, have real difficulty with impulse control. Their needs for large muscle activities or such releases as music should be channeled, not suppressed. In this way, they will not think of themselves as irritating or "bad" because they are unable to sustain effort for one thing for as long as other children do. Moreover, they will not be as irritating.

The strategy of changing the task frequently is specifically used by some special education class teachers in conjunction with learning centers, i.e., the task is changed every 15 minutes.

6. **Communicate closely with parent(s):** Frequent communication with the parent is often necessary as part of the process of helping the attention disordered child. One way to have positive home-school contact is through the use of a daily or weekly behavior feedback report.

A good note home can be a powerful reinforcer for a child. Any report system should be kept very simple but specifically tailored to the problem behaviors of the unfocused student, e.g., on-task behavior, task completion, talk outs, out of seat, etc. consider the use of ON-TASK cards or Happy-Face cards for young children. For serious problems of inattention, consider the use of the Home-School Management Plan. Ask your school psychologist for more information. It's simple and it works quite well with some students.

7. **Classroom Placement that is highly structured:** The inattentive child needs more external structure than most students. Consider a classroom set up along the lines of the Assertive Discipline model:

- clear rules regarding student behavior (do's and don'ts)
- rules are visible (posted)
- clear and reasonable consequences for breaking the rules are evident
- positive consequences are used for individual and group effort
- teacher is consistent in operation of the plan (i.e., delivers the con sequences
- there's a consistent class routine
- classroom is fairly quiet during work time

8. **Establish a personalized goal for the inattentive child**: For example, a goal to improve time on-task or task completion are often a desirable goal for unproductive inattentive student.

Attention problems are a serious handicap in the classroom. Show the student you understand the problem. Find out the average amount of time the student is able to stay on-task (a minute, 5 minutes, 10?). Make the student aware of this information. Ask the child to set a goal for him or herself: "Can you double this amount of time on-task by the end of the quarter?" (by the end of February?). Put the goal in writing. Use a kitchen timer to determine actual improvement.

9. **Secret signal:** Establish a secret signal to remind or cue the student to return to the task at hand. Be sure to give them your attention (i.e., praise, touch, etc.) when they are on-task. Possible signals: a nod, a secret word, e.g., "Michael, a glopnish" (which is a polite way of telling Michael to get back to work), or sometimes a glance or eye contact can be an appropriate signal.

10. **Adjust the task**: Even though a child can do a task at a certain level, often the inattentive child cannot do the task independently. Make the task easy to do independently (i.e., a level below his/her skill level). This helps establish independent work habits.

Other ways of making the task more appropriate or easier to accomplish is to place them in a lower group within the classroom or in another classroom (if necessary). Sometimes grade placement (retention) determination is necessary, especially if the child is inappropriately placed for all academic subjects at the primary grade levels.

11. **Color grounding:** Use a piece of construction paper in the student's favorite color as a desk blotter. Tell him/her that it will help to focus their attention. Who knows, sometimes the power of suggestion as well as the "placebo effect" can produce beneficial results.

A related color grounding technique has been effective with some children by using color transparencies to focus on reading tasks. Try experimenting (or have the student experiment) with different colored transparencies. Finding the right color can reduce "scotopic sensitivity" in some children.

12. **Coaching:** A little bit of individual coaching may be necessary for the inattentive/distractible child. The children often recognize and are especially sensitive to their own limitations; they become easily frightened and discouraged in new situations; therefore, a little training beforehand can often greatly help put these children at a level where they can complete more adequately. This kind of coaching is legitimate. Remember, these kids (unless hyperactive) have a hidden handicap.

DIET
MAN
AGE
MENT

TREATMENT WITH DIET MANAGEMENT

We have had enough time to determine that food allergies, food additives, vitamins, caffeine and sugar are only occassionaly related to the cause of and treatment for ADD symptoms. The results of recent investigations, which have demonstrated that a high protein breakfast produced a positive effect on ADD children, could be encouraging news. As school psychologists, we can make this low-risk recommendation to a parent to try the protein breakfast and sort of experiment with it. We cannot guarantee it, but it just might make a difference, especially if combined with other treatments. Also, as with other treatments, compliance on the part of the adult in charge is a critical factor in the success of the treatment. It may take a fairly sophisticated and motivated parent to conduct a reasonable trial of food management with their ADD child (i.e., they have to know the difference between foods containing high carbohydrates versus high protein). Nevertheless, this is one form of treatment that it does not hurt to recommend and it does not hurt the parent to try it as long as it is not used in place of other known effective treatments.

DIET MANAGEMENT AS A TREATMENT FOR ADD

There has been a considerable amount of interest in the connection of ADD symptoms and diet management. Specific areas of concern related to cause and/or treatment include food allergies, food additives, vitamins, sugar, caffeine, and protein versus carbohydrate intake.

Treatment for Food Allergies

The study of food allergies as it relates to school problems, including hyperactivity, learning disabilities and emotional problems is extremely complex. Food allergies are relatively common in children with 10-15% sufferers and another 30-40% showing mild allergic reactions *(Humphrey and White, 1970; Speer, 1975).* Foods most commonly found to contain allergens include cow milk, chicken eggs and cereals.

The connection between food allergies seems to be more closely associated with learning disabilities than with hyperactivity and ADD. A significant study by Trites (1980) evaluated the presence of allergies in three groups of children: hyperactives, learning disabled (LD) and emotional problems. The incidence of allergy in the LD group was 77% compared to 47% for hyperactives and 38% for emotional problems. When pure hyperactives were separated from LD-hyperactives the higher percentage of subjects with allergies favored the LD hyperactives.

The link between food allergies and ADD symptoms appear to be about as significant as the link between food additives (i.e., as in Feingold) and ADD symptoms. That is, there is a link in some cases and dietary management of food allergies may have some therapeutic value, especially with LD students.

Treatment restricting food additives

One treatment approach that stirred a lot of interest espoused by Feingold (1975) recommended restriction of food additives, dyes and preservatives to reduce symptoms associated with hyperactivity. Research evidence has since discredited the claims of the original Feingold diet as an effective means of reducing symptoms in all but a very small percentage (i.e., 1 or 2 per cent) of the ADD population (Silver, 1988). Research regarding the original "Feingold diet" claims were reviewed by Conners (1984). Conners cited the results of seventeen different research studies that specifically addressed the claims of the Feingold diet as "dramatically effective" in reducing problem symptoms of hyperactive children by eliminating foods that contained artificial colors, flavors and salicylates. The results of the studies produced inconsistent results.

Conners made the following conclusions:

1. There appear to be a number of preschool age children that do respond to the Feingold diet as predicted. School age children for the most part, did not respond to the diet to the extent of original claims.

2. "It is difficult to dismiss the Feingold hypotheses entirely, though neither the numbers of children not the size of the effects is as dramatic as originally claimed, even in those studies with positive results."

3. One particular study (Williams et al, 1978) evaluated the idea that the Feingold diet could eliminate the need to use medication to control hyperactivity. The results did not support the idea that the elimination diet could replace the medication, but the best results were observed for hyperactive children who received both treatments.

*I*n general, the conclusion drawn by most experts regarding the Feingold diet as a treatment for ADD, was aptly stated by *Barbara Ingersoll (1988, page 88)*:

> **Obviously, I cannot recommend the Feingold Diet or any of the defined diets as likely to be helpful to your hyperactive child. These diets are complicated and time-consuming to use and difficult to enforce, especially if your child is away many hours of the day. More important, you may do your child a real disservice if you focus on diet to the exclusion of more effective treatment methods.**

Vitamin Treatment

Vitamin and Megavitamin treatment has been recommended for various childhood disorders including autism, learning disabilities and hyperactivity. In general, vitamin therapy has not yielded any consistent results, especially in the treatment of ADD or hyperactive children.

The research results have been very conflicting with vitamin therapy. For example, Brenner (1982) said that B complex vitamins were effective in reducing symptoms with hyperactive children while Haslam (1984) found that megavitamins were not as effective as placebo.

Coffee, Caffeine Treatment

Since caffeine is a central nervous system stimulant, like Ritalin and Dexadrine, there has been some speculation that hyperactive children might respond to coffee treatment.

As with most of the other forms of diet treatment for ADD children, the results of studies that looked at coffee or caffeine intake have demonstrated conflicting results. Ross and Ross (1982) reviewed eleven studies that involved coffee treatment for hyperactives. Some studies showed theraputic effect while others reported no effect. The main conclusion drawn was that coffee or caffeine treatment for ADD symptoms is definitely not as effective as conventional stimulant medications like Ritalin, Dexadrine and Cylert. Besides, even if coffee was effective, the effect is very short term (30 minutes) and is difficult to control in terms of dosage.

Treatment Restricting Sugar Intake

Research results that demonstrated a positive connection between hyperactivity and sugar intake (Prinz, 1980; Goldman, 1986) was refuted by studies that demonstrated no behavioral changes in hyperactive children who either took sucrose or placebo (Milich, Wolaich and Lindgren, 1986; Milich and Pelham, 1986; Behar, et. al, 1984). The research by Milich, et al (1986) concluded that sugar had no effect on specific behavior of hyperactive children, including academic productivity, academic accuracy, social behavior, on-task behavior and body movement.

Treatment by High Protein Breakfast

Sugar by itself may not be so significant in exacerbating ADD symptoms in hyperactives and normals; however, it has been suggested (Conners, 1984) that the sugar effect depends upon what other foods are injested with it, which is exactly why food/diet management is so complicated--there are too many variables. Conners points out that behavioral studies have produced conflicting findings with regard to sugar effect because often studies fail to control for the "breakfast effect" and especially the role of protein in blocking the carbohydrate-induced rise in brain serotonin, a chemical messenger in the brain. Conners study in 1987, which did control for breakfast effect on hyperactives and normals, yielded some interesting results. When hyperactives consumed a carbohydrate breakfast (buttered white toast) with a sugar drink, attention to tasks deteriorated significantly compared to normals in injesting the same breakfast. Furthermore, when hyperactives ate a high protein breakfast (two scrambled eggs in butter) their attention to laboratory tasks increased significantly--even to normal levels on some tasks. Hyperactives performed one particular task (CPT) with as much improved concentration as achieved with stimulant medication, i.e., Ritalin.

In his recently published book, *Feeding the Brain* (1989, page 99), Conners speculated on the relationship of sugar, protein and carbohydrates with the biochemistry of the brain as it pertains to children with an attention disorder:

> **". . .some children have a deficit in the ability to manufacture or use certain basic neurotransmitters. This deficit in turn causes them to be hyperactive. Food plays an important role in this process, for we need proteins like tyrosine and phenylalanine to manufacture the neurotransmitters. We saw that sugar helped hyperactive children when they also consumed protein, suggesting that sugar helps the protein get to the brain where it can be useful. Carbohydrates, on the other hand, seemed to make the children worse, when they received the sugar challenges, possibly because the greater insulin response produces a rise in brain tryptophan and serotonin, in effect slowing the children's thought processes down, much as serotonin does in natural sleep.**
>
> **Speculations about the role of sugar, hormones, and neuro-**

> **transmitters can become overwhelmingly complex. Yet, we cannot ignore the practical consequences of our findings. Children should not load up on carbohydrate meals and sugar at the same time, and some protein in the meal is always sensible."**

Conners (1989, page 73) speaks clearly to the recommendations for a protein load at breakfast by saying:

> **Our studies show that protein in breakfast is important. Normally,milk and cereal will provide enough protein to avoid swamping the child with too much carbohydrate, which, as we have shown, impairs attention. But many children will eat just waffles and syrup without milk. Many poor children eat either nothing or some convenient leftovers of potato chips, candy, or pasta.These are just the conditions most likely to further increase their disadvantages in life.**

Conners concludes that there is good reason to believe that ADD children appear to be more sensitive to increases in serotonin brought about by the consumption of carbohydrates and sugar together. Sudden surges of serotonin may also throw off kilter related chemical messengers (i.e., dopamine and norepinephrine). Protein, on the other hand, tends to increase levels of amino acids (viz, plasma tryptophan) that help to block the effects of sucrose on the brain and perhaps produce a physiological effect somewhat like Ritalin does on hyperactive children. However, this is not to say that a high protein breakfast can be used in place of stimulant medication for the "true" ADD child.

What can the school psychologist recommend regarding diet management?

A general recommendation would be that children eat breakfast and that the breakfast contain protein. The idea of a protein load at breakfast for inattentive students is probably the most practical, and potentially the most effective, diet treatment that can be recommended to parents. Good sources of protein are contained in the following breakfast foods:

> eggs, cheese, nuts, peanut butter, meats (including ham, bacon, sausage or hamburger). Cereal with milk, and protein mix with milk (e.g., Instant Breakfast). Do kids eat tofu for breakfast?

The sample high protein breakfast menu shown below is also found in the Appendix. Copy the menu in the Appendix and give it to parents for their consideration.

THE TWO WEEK HIGH PROTEIN BREAKFAST TRIAL

SUGGESTED HIGH PROTEIN FOODS for the INATTENTIVE CHILD A.M. FEEDING

BREAKFAST

— cooked eggs - whole wheat toast
— cooked eggs - meat
— cooked eggs -cheese
— cold cereal - whole milk (all milk consumed)
— peanut butter on whole wheat toast or whole wheat waffle (jelly ok)
— protein powder and milk (e.g., Instant Breakfast)
— flavored yogurt on whole wheat waffle

SNACK

___ 2 handfuls of unsalted peanuts with 1 handful of raisins
___ peanut butter and jelly sandwich
___ string cheese

- **DON'T EAT MORNING FOODS CONSISTING OF PRIMARILY CARBOHYDRATES AND SUGAR (e.g., pancakes and syrup)**
- **Call teacher on Thursdays to see if the protein at breakfast helps improve concentration at school.**
- **Write oncalendar what child ate for breakfast.**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY

Figure 11. The Two Week High Protein Breakfast Trial

CONCLUSIONS

The relationship of food allergies, food additives, vitamins, sugar, caffeine, protein, carbohydrates, fats and the entire study of foods in general to the condition of the ADD child is so complex that it boggles the mind--although my mind is easily boggled. As a school psychologist, I think that I understand the behaviors associated with the symptoms of poor attention, distractability, impulsivity, hyperactivity and agressivity much better than I understand the dynamics involved in the biochemistry of the brain that causes these behaviors.

I do believe that foods affect behavior and this is easy to comprehend as I drink a cup of coffee at 7:00 a.m. to "get going" or have a glass of wine at 5:30 p.m. to "unwind". But, it seems as though we've had enough time to determine that food allergies, food additives, vitamins, caffeine and sugar are only occasionally related to the cause of and treatment for ADD symptoms. The results of recent investigations which demonstrated that a high protein breakfast produced a positive effect on ADD children could be encouraging news. As school psychologists, we can make this low-risk recommendation to a parent to try the protein breakfast and sort of experiment with it. We cannot guarantee it, but it just might make a difference, especially if combined with other treatments.

Lastly, as with so many treatments, compliance on the part of the adult in charge is a critical factor in the success of the treatment. It may take a fairly sophisticated and motivated parent to conduct a reasonable trial of food management with their ADD child. Nevertheless, this is one form of treatment that it does not hurt to recommend and it does not hurt the parent to try it.

PARENT TRAINING

TREATMENT FOR THE ADD CHILD AT HOME: Parent Training in Behavior Management

Having an ADD child is a real test of parenting skills. The interaction between the attention disordered child (especially those highly impulsive and hyperactive) and his parent(s) often become unpleasant to the point of destruction. There is a potential for a high degree of negative interaction between ADD children and their parents because the child's uncontrolled behavior often elicits a coercive, controlling and critical response set from the parents. This coercive parenting style can then elicit escalation and maintenance of counter-aggressive (coercive) behavior in the child. The trick in parent training, therefore, is to teach the parents how to interrupt this coercive cycle of interaction in order to manage momentary disruptive behavior as well as to avoid long-term damage to their relationship with the child.

PARENT TRAINING

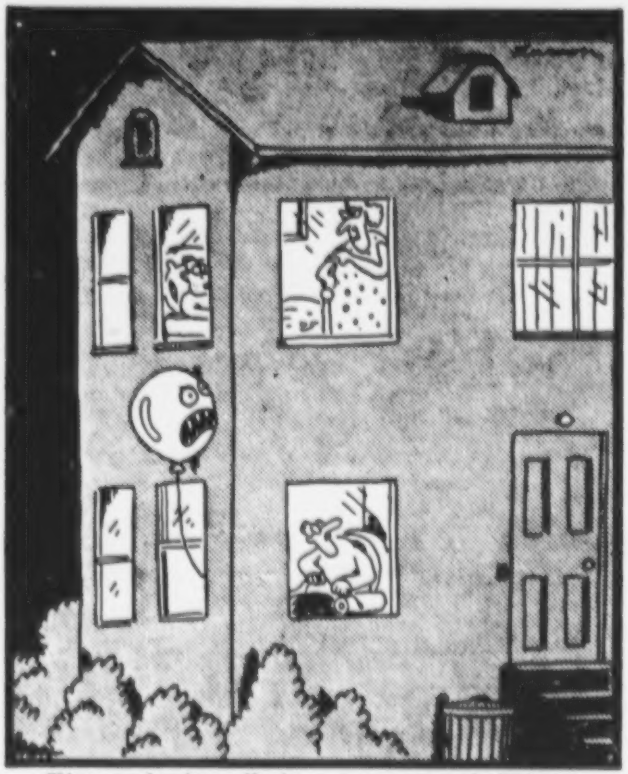
Parent Training in Behavior Management

The ADD child is usually a severe test for any parent with regard to parenting skills. Training parents in behavior management strategies is an essential component of the treatment for ADD children and getting this treatment to parents is easier said than done. The school psychologist can assist the willing parent in receiving appropriate parent training by one or more of the following ways:

1. Referral to a qualified professional parent trainer, e.g., clinical psychologist or family counselor.
2. Provide direct brief training in behavior management, if within their role and capabilities (e.g., consultation and bibliotherapy).
3. Provide parents with appropriate resource information such as"packaged" parent training (behavior management) programs which include booklets, guides, audio tapes, video tapes, self improvement materials, etc.
4. Referral to parent support groups for parents of children with ADD and/or learning disabilities. These groups often incorporate the themes of behavior management in their discussions and presentations.

Remember, it is the parents' responsibility to socialize their children, to teach them to curb impulses and to exercise self-control, all developmental tasks which are rendered more difficult by virture of the ADD child's inherent problems with short attention span, impulsivity and distractability. Most children who do take stimulant medication to control problem behaviors are not under medication control on weekends, evenings, holidays and summers; and, therefore must be managed by their parents during these "off" periods.

It is important to reemphasize that the interaction between the attention disordered child (especially those highly impulsive and hyperactive) and his parent often become unpleasant to the point of destruction. There is potential for a high degree of negative interaction between ADD children and their parents because the child's uncontrolled behavior often elicits a coercive, controlling and critical response set from the parents (Barkley and Cunningham, 1979; Patterson, 1976). This coercive parenting style can then elicit escalation and maintenance of counter-aggressive (coercive) behavior in the child (Patterson, 1976; Conners and Wells, 1986). The trick in parent training, therefore, is to teach the parents how to interrupt this coercive cycle of interaction in order to manage momentary disruptive behavior as well as to avoid long-term damage to their relationship with the child. Unfortunately, the parent-child relationship often becomes so damaged that positive attention from the parent seems to have diminished effects as a reinforcement (Patterson, 1976) for appropriate prosocial and compliant behaviors.



"Now go to sleep, Kevin — or once again I'll have to knock three times and summon the Floating Head of Death."

*T*he above cartoon* by Gary Larson is an example of a coercive parenting tactic that should be avoided. While this depiction is intended to be humorous, the theme is probably quite realistic as an example of an aversive parent-child interaction. Threats and fear tactics can produce anger and counter-attacks as the child eventually learns that the threat is not real.

---

*Permission to reprint this cartoon was granted by Gary Larson and Universal Press Syndicate.

The school psychologist should always discuss with the parent the need for parent training in behavior management for any type of child with ADD symptoms; whether parent training is actually recommended should be part of that discussion, except for the Type 1 ADD child.

Treatment with parent training in behavior management

Form	Discuss	Recommend
Type 1 Hyperactive-Aggressive	YES	YES
Type 2 Mixed symptoms	YES	if needed, and parent agrees
Type 3 Inattention-Passive	YES	if needed, and parent agrees
Type 4 Pseudo-ADD	YES	if needed, and parent agrees

Parent training for Type 1 should always be recommended because this child has learned the very serious' secondary symptom of aggressivity and associated anti-social behaviors such as fighting, cursing, stealing and lying that often lead to more serious anti-social conduct problems later in life. The aggressive behaviors that a kindergarten or first grade child exhibits at school are ordinarily learned through the dynamics within the family in the pre-school years.

The fault should never be placed upon the parent. Remember, while it's not the fault of the child that they exhibit ADD symptoms, the inappropriate behaviors that the ADD child displays are difficult and sometimes impossible to manage and then child's behavior often becomes quite provocative which brings out the worst in parents (usually mother to son). The resulting interaction between parent and child that involves attack and counter attack provides an abundance of practice in aggressivity which at the preschool level often takes the form of tantrums. The typical mechanisms that operate to govern parent-child interactions in families with normal children break down in dealings with ADD children because of their lesser responsiveness to the normal management methods. The ADD child seems to evoke the "get tough" approach which is often associated with real frustration and anger in the parent. Emphasis of this point to the parent helps them understand how their family, and in particular their interaction with their children, may have evolved to their current problems; and this also helps the parent realize that it's not their fault.

Specific Forms of Behavior Management in Parent Training

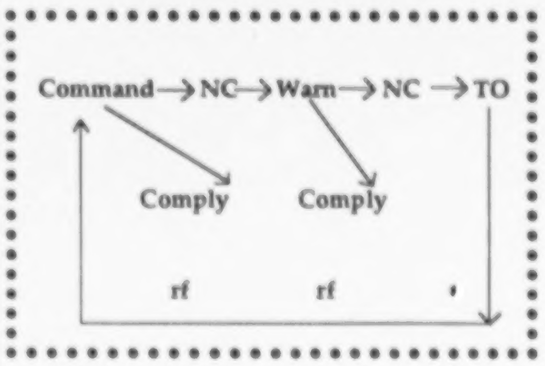
Some school psychologists can provide direct parent training services although this role is definitely not universal. More often, parents will be referred to an "outside agency" or clinician for parent training in behavior management. An example of a behavior management approach in parent training (Forehand and McMahon, 1981) might include the following three steps:

1. Parents are first taught how to pay attention to their child's good behavior (i.e., "catch 'em being good") using "attending and following" skills in which they describe the child's on-going behavior out loud. Attending practice is done as a method for reinforcing appropriate child behavior, increasing the parents' reinforcement (rf)value to the child, and promoting a more positive relationship between parent and child.

2. Step two involves teaching parents how to give verbal and nonverbal rewards to their children. Rewards are then added to attending skills and the parents practice attending and rewarding while the child plays at home 15 minutes a day. Once play sessions are going smoothly, parents learn to use their attending and rewarding skills to encourage appropriate child behavior (e.g., following directions, finishing a task, etc.) and to withdraw attention as a means of decreasing inappropriate behavior.

3. In the third step, parents learn a specific punishment technique called time out (TO)to be used as a consequence for non-compliance (NC) and other behaviors that cannot be ignored. Parents must learn to give clear, specific, direct, concise commands that are age appropriate and do not exceed the developmental capabilities of the child. Parents are taught a time out technique contingent upon non-compliance to parent instructions. Time out involves sitting the child in a chair in a corner and ignoring all talking or misbehavior the child displays in the chair. After time out, (5 to 10 minutes), the child is allowed to come back and follow instructions. The time out sequence continues until the child eventually complies to the command as depicted in the following paradigm.

COMPLIANCE TRAINING



Parent Training Programs:

Teaching parents to be better managers of their child's behavior is especially appropriate for the ADD child regardless of other treatment approaches used at the same time. Unfortunately, the school psychologist is often in the position of knowing that parent training is needed in a particular case when resources are unavailable or the parents do not cooperate in accepting services! In this situation, the school psychologist can recommend appropriate reading materials for the parents or parent training video tapes that are available.

Consider the following prepared programs for parents of children with ADD.

Books and booklets:

1. Canter, Lee. *Assertive Discipline for Parents*
2. Nichamen, Samuel J. and Wendel, James. *Coping With Your Inattentive Child.*
3. Beck, Carol and Cuto, Kerry. *You Can Control Your Child's Behavior.*
4. Minde, Klans. *A Guide for Parents on Hyperactivity in Children.*

Audio/visual programs:

1. Parents and Children: *A Positive Approach to Child Management.* Consultants Forehand and Foxx. Research Press: 16mm, VHS or Beta presentations.
2. *Behavioral Principles for Parents: A Discrimination* Program. Dr. Rex Forehand Research Press: VHS

Parent Training - When do you need it?

Using the model that there are four types of ADD found in the school setting, we see that Type 1 and Type 2 are often accompanied by secondary problems related to inappropriate social behavior, i.e., oppositional behavior, defiance, noncompliance and aggressive behavior. In short, these kids develop social problems as they get older which they often don't outgrow.

It is suggested that while the primary symptoms of ADD (inattention, impulsivity, restlessness) are caused by biological factors sometimes not changed much by intervention, the secondary symptoms of oppositional, defiant, non-compliant and aggressive behavior, is learned. These secondary symptoms can be extinguished by appropriate intervention involving parent training.

Patterson's research support the idea that coercive parenting techniques actually facilitates aggressive behavior in children. In the case of an ADD child, untrained parents frequently resort to coercive methods with their hard-to-manage child. The parents of ADD children typically give more commands and directions. On the other hand, these parents are less attentive and are not reinforcing to play, cooperative behavior and compliance. Parents of ADD children tend to be punitive in their reprimands and punishments. These kids are difficult to manage (especially types 1 and 2) and parents are simply not prepared to cope appropriately.

Barkley has delineated a 10 step program for parents of ADD children which is summarized below:

1. Providing parents with information about ADD. Parents receive detailed in formation on the nature, associated features, etiologies, develomental course, outcome, and proven and disproven treatments for ADD.

2. Instructing parents in the processes and concepts involved in child misbehav and the reasons for its development and maintenance. Parents are taught that misbehavior stems from four levels of causes, each interacting with the others to culminate in behavioral problems. These levels are child characteristics and competencies (e.g., developmental delays, negative temperament, health problems, etc.), parent characteristics and competencies, consequences for misbehavior when it occurs (e.g., escape or avoidance of chores and work, increased parental attentions, etc.), and family setting or stress events(e.g.,marital discord, parental unemployment or financial problems, problems with siblings or other family members, etc.).

3. Training parents in ways to develop and enhance their positive attention to the ADD children and their appropriate behavior. Such parents often rely heavily on reprimands, punishment, and other aversive behaviors to manage child misbehavior.

4. Extending parental attention to child compliance. This step then increases the use of parental positive attention for reinforcing child compliance with commands and rules of the household.

5. Using home token reinforcement systems. It is naive to assume that the use of parental praise and attention alone will substantially alter misbehavior in ADD children. Such children appear to require more frequent and salient consequences if their appropriate behavior is to be sustained to achieve this end, parents are trained in the implementation of a "poker chip program" or home point system for reinforcing the children's performance of chores and other re-

quired activities.

6. Employing response cost and time out as disciplinary tactics. Parent now receive training in the use of fines within the home token systems for minor rule infractions and noncompliance. Subsequently, they receive intense instruction in a highly effective time-out technique which relies on immediate isolation of the children to a dull corner of the home contingent on noncompliance.

7. Extending time out to other home misbehavior. Since parents are restricted to using timeout for only one or two types of misbehavior in the previous step, this step focuses on troubleshooting problems that are experienced by the parents in the prior step, and then extending the use of time out to several other misbehaviors by the children.

8. Managing child misbehavior in public places. Prior to this step, parents are requested not to use the techniques to manage behavior problems in stores, restaurants, church, or other public places. The nature of these settings is such that minor modifications to the use of the management methods is required to employ them effectively in public places. The intent of this step is to discuss in detail how prior management methods can be effectively used in these settings. Parents are further instructed in a "think aloud-think ahead" procedure wherein, prior to entering a public place,a plan for managing misbehavior is developed and shared with the children.

9. Managing future misbehavior. This step challenges parents with types of misbehavior not yet shown by the children and requires them to design a method of management for that problem based upon the methods learned to date. It is hoped that this step encourages parents to generalize their new management skills to possible future problems they may encounter with their ADD children.

10. One-month booster session. Following training, parents are seen in one month to review possible problems developing in the management of the children, to review prior techniques and information as needed, and to render any further services which may be needed.

Barkley's ten-session parent training program was specifically designed for helping parents manage their hyperactive/ADD child. This training program, "Training Parent to Cope with Hyperactive Children," is contained in Barkley's book, *Hyperactive Children: A Handbook for Diagnosis and treratment* (Chapter seven). The school psychologist, clinical psychologist or family therapist could implement this excellent parent training program. The program outlined by Barkley represents the ideal parent training program specifically designed for the parents of the ADD child.

Barkley also has an excellent one-hour (VHS) video overview of ADD for parents and teachers. ADHD by Russel Barkley ($35.00) available from:

New England Attention Disorder Association
P.O. Box 82
Northboro,MASS. 01532
Phone (508) 393-8039)
Ask for Chris Blair

Parent Training in Homework Management

The child with an attention disorder who is not in a special education program will probably not have a "system" to get their homework done. And, even if these students are on medication, the effects of the medication have worn off when it's time to do homework. Homework is ordinarily the responsibility of an ordinary student, i.e., being able to focus on an academic task independently. Unfortunately, the ADD student has a great deal of difficulty completing practically any tasks, especially academic tasks, because they lack the prerequisite skills to do homework.

Homework is a fairly complex process that starts at school with the work assignment given by the teacher and ends with the student returning the completed work to the teacher when it is due; the steps between when the assignment was given and when it was to be returned involve all sorts of complicated tasks that are difficult for the typically disorganized ADD student. Here are a few of the problems that can impede the process of homework for the ADD student:

1. He does not write down the assignment. Consequently, he forgets what he is to do.
2. He copies the assignment but doesn't understand what he is to do.
3. If he understands the assignment and writes it down, he misplaces it somewhere between school and home.
4. He forgets necessary books and materials.
5. At home, he postpones and procrastinates as long as possible, approaching his work only after prolonged parental nagging and threats.
6. Once at his desk, he daydreams, fiddles with objects, and does everything but the assigned work. Constant supervision is needed to keep him on task He drags his homework out for hours.

7. He rushes through his work, producing a product that is smudged, messy, and illegible.

8. He doesn't check his work for errors, so the finished product is full of careless mistakes.

9. Even when he has completed his assignments, he forgets to turn them in, e.g., "the dog ate it."

The ADD student needs a plan and a system to successfully accomplish the task of homework. The parent must be committed to serve as manager of a system whereby they provide the necessary supervision and monitoring of the homework process. How does a parent know what to do? Probably a more fundamental question could be: "Does the parent really want to help or does the parent really care about the homework process?" If the answer is "yes", then we need to refer them to a well designed behavior management system that specifically breaks down the homework process so that a parent can manage a child each step of the way.

A recommendation that can be made to the interested parent: *Homework Without Tears for Parents* (1987) from Lee Canter and Associates, available at local school supply stores, or call 1-800-262-4347 ($7.95).

The *Homework Without Tears* system provides a parent with the specific instructions to training their child to do the following:

- How to set up a proper study area
- Doing homework on time
- Learn how to work independently
- How to motivate the child to do their best work
- How to work with the teacher
- How to solve homework problems
- How to help the child study

Training the student to attend to homework tasks by a methods of self-monitoring:

Parents often ask how they can actually teach their child to concentrate better or "increase attention span." My response is that other than medication, "it ain't easy." Compensatory skills must be taught to the child and what works at home may not work in a classroom full of distractors.

One technique that some fairly sophisticated parent may want to try at home in conjunction with homework is to train the child to self-monitor on-task behavior. This technique is not as complicated as it sound. Ingersoll explains the home version of this technique which was originally used in the classroom with elementary age children (reference: Glynn and Thomas, 1974). The technique involves the use of an "attention tape" made by the parent with a tape recorder and a tone producer (e.g., tap a table knife against a water glass):

1. Start the tape and allow it to run for 15 seconds and then announce "Begin."

2. Record a tone one minute after you have said "begin." An other tone two minutes there after; another tone 3 minutes later, etc.

3. When the child is ready to begin doing homework the tape is started, whereby at the tone the student asks himself "Was I paying attention to my work? Somewhere on the work being done or on a separate sheet, he checks (√) himself either "yes" or "no" on a yes-no column format.

Tape 1 intervals: 1, 2, 3, 2, 1, 2, 3, 1 (15 minutes)

Tape 2 intervals: 3, 3, 2, 4, 3, 3, 2 (20 minutes)

Tape 3 intervals: 3, 4, 3, 5, 4, 2, 4, 3, 2 (30-minutes)

Ingersoll indicates that this technique has proven practical as a means of increasing on task homework behavior for the ADD student.

QUOTE:

> Initially, it may be necessary for you to supervise this procedure, but as soon as possible the task should be turned over to your child. If self-monitoring is presented as an enjoyable challenge, most children will cooperate willingly. As your child's ability to stick to his work improves, more challening tapes can be made by using the list for Tape 2 to produce a twenty-minutes tape, then by using the list for Tape 3 to make a thirty-minute tape. By the time your child has advanced to the third tape, she should be able to focus on his work for time adequate to complete his homework, allowing for breaks every half hour or so. (Ingersoll, p.190).

ADD Parent Support Groups

There are parent support programs for LD students, Tourrette syndrome children, Down Syndrome children, etc. What about parents of ADD kids? Fairly recently (1987) a group called CHADD was started in Plantation, Florida by parents of children with ADD in association with a group of local professionals who all had an interest in working with ADD children. CHADD is the acronyn for *Children with ADD*.

It is important for the school psychologist to know about the existence of parent support groups for parents with children with specific childhood disorders. Parent support groups like CHADD can really be helpful to parents who need and want support in dealing with their ADD child. A parent support group can also be a vehicle for providing parent training.

Parent support groups like CHADD are being formed in various parts of the United States. The national headquarters for CHADD (below) is in Florida.

CHADD
1859 North Pine Island Road
Suite 185
Plantation, Florida 33322
(305) 384-6869 or 792-8100

The national organization can help any interested people form a local chapter. For example, at the present time there are five CHADD chapters in California; each chapter is headed by a Parent Coordinator. A school psychologist could be instrumental in selecting and encouraging an interested parent to spearhead a CHADD chapter. Additional information about CHADD can be found in the Appendix in the form of a abridged version of the *CHADD Chapter Formation Manual*.

Other parent support groups and associations are listed in the Appendix.

In conclusion, parent training in behavior management is very important in the treatment process for the ADD child, especially when the symptoms of aggressivity is evident. Not all parents are willing to accept formal training in behavior management as discussed here; however, the school psychologist can introduce behavior management strategies by providing parents with reference materials; homework management ideas; referral to a parent support group (if available) and simple behavior management programs that bridge home and school as described in the section to follow.

BEHAVIOR MANAGEMENT

TREATMENT WITH BEHAVIOR MANAGEMENT AT SCHOOL

Behavior management, behavior modification and operant behavioral techniques used in learning and shaping children's behavior have been widely accepted and applied to the school setting (especially special education programs) since the mid 1960s.

The literature on child management is full of well designed, practical programs for behavior management at home and at school. The very best programs seem to be the ones that bridge home and school by creating a line of communication between parent and teacher. The behavior management programs presented here have been applied successfully to improve student behavior by closely monitoring (and reinforcing) the student at home and at school.

Behavior Management in the Treatment

BEHAVIOR MANAGEMENT IN THE TREATMENT OF ADD STUDENTS

School psychologists deal with problems that students have in school which include one or all of the following:

1. learning problems
2. work habit problems
3. social behavior problems

Whether the child is a true ADD child or not, behavioral techniques are often the first line of treatment or intervention for students with problems at school. Behavior management involves a special individualized program for a student which strengthens reward and punishment consequences for specific behavior (e.g., on task) at school and/or home. A comprehensive behavior management plan for a particular child will include parent training, a management plan for the teacher in the classroom and social skill training for the student. Unfortunately, its impossible to deliver all of these components from the school setting. Realistically, the school psychologist can be the coordinator of the management plan for the teacher in the classroom. The willing teacher is the manager of the management program and uses a school psychologist as a consultant.

Behavior management used in treatment for the ADD child is also synonymous with the techniques known as behavior modification and behavioral therapy. In it's simplest form, behavior management involves the use and application of the laws of learning on purpose. With techniques we use in the school setting, the school psychologist can be instrumental in setting up a behavior management system. The school psychologist does not actually implement the plan but acts as a consultant in the process of dealing with "problem behaviors" in the classroom. The management of a behavioral program is performed by the significant person who consistently supervises the child in the setting where the problem behavior is exhibited. For example, in the classroom setting the teacher is the most significant reinforcing agent to the child and therefore s/he is the manager of the behavioral system to be implemented.

The fundamental principles of rewarding appropriate behavior and ignoring and/or punishing inappropriate behavior occurs naturally with "normal" parents (and teachers) who deal with "normal" children. Unfortunately, the ADD child is not normal; the symptoms of their condition are manifested in a high rate of inappropriate behaviors (e.g., talkouts, out of seat, aggressive acts like hitting and pushing, and acts of non-compliance which includes off task behaviors) that evoke a high rate of critical, negative and often coercive (punishing) responses from the significant adults who interact with them on a daily basis (i.e., parents and teachers). These kids receive more than their fair share of reprimands and critical remarks which subsequently affects their feelings of self-worth.

The fundamental principles of behavior management that systematically uses rewards and punishment is often not very effective with the true ADD child because these children do not have control over their own level of attention, impulses, and the level of their own motor activity. As a treatment technique by itself, behavior management can be an exercise in futility with the ADD student. The true ADD student simply cannot help it! That is, they cannot help being inattentive; they cannot help being impulsive; and they cannot help being overactive. We wouldn't expect a child with a known brain dysfunction, like a seizure disorder, to be able to control their seizures by positively reinforcing them for not having a seizure and by punishing them for having one. We suspect that the true ADD child has a brain dysfunction; therefore, if we could somehow allow their brain to function more normally, behavior management techniques would be as effective as they are with normal children.

The literature that has dealt with the research on the efficiency of behavioral techniques compared to treatment with medication has concluded that medication is more effective than behavioral techniques for management of the symptoms associated with ADD (Gittleman, 1983).

Furthermore, the research evidence (Gittleman, 1983; Pelham and Murphy, 1986) suggests that some children who are only partially improved on stimulant medication can benefit from a combination of medication and behavior management strategies. Again, a combination of treatments is the most effective method for facilitating a successful program for the ADD student.

As school psychologists, we often use behavior management strategies because they are effective with most students and because they can be applied within the school setting. Behavior management as a treatment approach probably fits better into the role of the school psychologist than direct counseling of students. My own belief is that if I can help a teacher as a consultant to manage a child's behavior, the results will be better for both the child and the teacher than if I tried to counsel the child directly into becoming more teachable.

PRINCIPLES OF BEHAVIOR MANAGEMENT WITH THE ADD STUDENT

Teach the child how to behave and follow rules and learn self-control

1. Reward and offer positive feed back for appropriate behavior

- These rewards and positive reinforcers should be frequent - at least daily for older children and much more frequently for younger children.

- Reward not only achievement but also effort, improvement, and compliance.

- Consider rewarding the absence of a certain target behavior for a certain period of time - e.g., reward the absence of disturbing others in the class for one hour.

THE HAPPY FACE SYSTEM.

e.g., put a sticker on a chart for task for task completion and reinforce with a positive verbal statement.

- Reward or positive feedback can take these forms:

  - Social (Physical or Verbal. Note: Social reinforcers are often not powerful enough if used alone with ADD child. They should be accompanied by other forms of reinforcers.

  Since the ADD child has great difficulty following rules, pay particular attention to efforts the child makes toward compliance. Don't walk away from the child when he is doing what he is told. Spend some time letting him know you have noticed and appreciate his compliance. "I like it when you do as I asked". Be specific with your praise. Label the specific behavior as much as possible. "I really like it when you stay in your seat." "You did an excellent job listening in the group today." When you find that the child has done a task or followed a class rule without being reminded, that is the time to really pay exceptional attention and praise. This will help the child internalize the rules and want to remember and obey them.

  - Edibles (very young children)

  - High-rate Activities or (e.g., free time, computer time, games, special activity center, etc.)

  - Symbolic (tokens, points, check mark, hole punched into card, smiley face, sticker; these can be exchanged for privileges or other rewards.

- Be sure that the child sees the particular reward(s) you are using as rewards! Remember, that the ADD children need more powerful, compelling rewards than do normal children.

- Make sure that the child gets the reward only when certain behaviors occur - e.g., an ADD child should always earn free activity time if this is going to be used as a reward in the classroom.

- Change the rewards frequently so that any one does not lose its hold on the child.

- Reinforcement (rf) and the law of parsimony:

The law of parsimony simply states that, "Use the least reward for the greatest good", e.g., don't use a dollar when a penny will do.

Levels of reinforcement:

law of parsimony would imply that you use the natural reinforcer before you go to the contrived.

	TYPE	EXAMPLE
Natural ↑	Intrinsic	**A sense of accomplishment and/or sense of relief**
	Social	**Acknowledgement from another, e.g., verbal: "good thinking" and/or physical: pat on the back**
	Contingent	**Earned privilege or activity, e.g., "you can watch TV when you finish your homework".**
	Symbolic	**Stickers, stars, tokens and chips.**
↓ Contrived	Primary	**Earned tangibles, e.g., food, money, toys, etc.**

2. Develop pre-established consequences for both appropriate and inappropriate behaviors.

   - Avoid implusive selections of consequences that are harsh, prolonged, vague or unenforceable.

   - Select consequences that are relevant to the child's behavior so that the child can understand that the outcome is a logical consequence of his behavior, not an isolated punishment, e.g., if a child hits a classmate during recess, he should be deprived of the remainder of that recess period - not given extra home work.

- Define behaviors and consequences clearly. Avoid ambiguous statements like "If you're a good boy today, you can earn some free activity time." Instead: "If you work quietly at your desk without getting out of your seat for 20 minutes, you may earn 10 minutes of free activity time."
- Be consistent. Don't alternate between giving in and being firm. And, be consistent about rewarding or praising acceptable behavior.

3. Limit yourself to one warning or signal, if any. Then enforce the consequence for misbehavior.

4. When enforcing a negative consequence:

   - Stay calm. Show no anger, irritation or rejection toward the child. Try to separate the child's misbehavior from the child himself.
   - Be firm. Avoid power struggles and arguments. Don't get defensive about enforcing a procedure or limit that was carefully communicated. Avoid lengthy explanations, discussions or pleading.
   - Briefly verbalize the reason for the consequence to help the child learn the cause-effect relationship - e.g., "You were fighting. You will have to spend five minutes on the time-out chair."
   - After enforcing a negative consequence, discuss the incident with the child communicating your desire to help him learn more appropriate behaviors.

5. Apply both positive and negative consequences immediately after the positive or negative behavior (preferably within 10 seconds). The greater the delay of consequences, the less effect those consequences will have on future behaviors.

6. Negative consequences for misbehavior can be:

   - Verbal - Reprimand the child quietly. Focus on the unacceptable behavior rather than on the personality. Note: Verbal reprimands alone are not highly effective with ADD children. They need to be accompanied by another more powerful consequence such as one of those following:
   - Loss of privilege, desired activity
   - Loss of tokens, points (if such a behavior management system is being used) response cost.
   - Time out - must be used appropriately.
   - Ignoring the misbehavior (This

must be accompanied by reinforcement of appropriate behaviors) Note: when misbehavior that previously got attention is ignored, the behavior will often get worse before it gets better.

7. If the child becomes intensely negative:
   - Reassure the child with a hand on the shoulder.
   - Offer a supportive comment or offer to help.
   - Divert the child's attention to a different topic, situation, or less frustrating task.
   - Give the child a break or allow the child to regain composure in a pre-established time out area.
   - Use humor.

8. Try to get extra help for the child
   - Have the child work with the teacher's aide or parent volunteer in small group or individual setting.
   - Encourage the school counselor to work with the child who is discouraged, performing or behaving poorly. Counsel the child, helping him to gain in sight into his attention deficit and to understand that he will have to try harder than other children.
   - Communicate to parents about tutoring or summer school possibilities.

9. Work closely with the child's parents
   - Be sure to report positives as well as negative. Encourage the parents to reinforce good behavior in school and at home. An effective device is a daily report card. The teacher rates specific behaviors and the reinforcement is carried out at home. HAPPY FACE SYSTEM between home and school.
   - Let parents know about problems as soon as possible.

BEHAVIOR MANAGEMENT: A SAMPLE OF SOME SIMPLE SYSTEMS

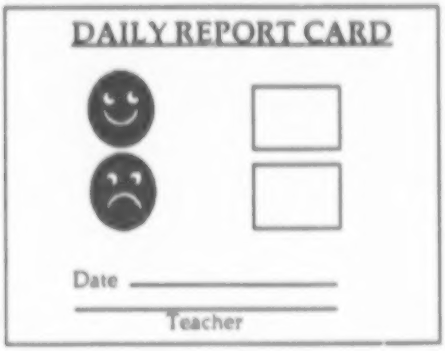
There are many excellent behavior management systems that can be applied to the classroom (regular or special education) to help a teacher to manage the problem child or a problem class. The best systems are those that are tailored to the problems and needs of a particular child. Teachers often object to providing special treatment for an individual child when it doesn't apply to the rest of the class. Unless you can make a behavioral system very simple for the teacher and/or parent to implement, there's an inherent risk that this treatment won't be very effective because the people who actually deliver the treatment to the child don't really do what they are

B.M. Sample 1:

(Kindergarten through 3rd grade)

The Daily Report Card and the Bedtime Agreement

Teacher issues daily report card to student. This system uses a daily report card like the one below to inform the parent if the child was able to demonstrate specified targeted behavior (e.g., **completed work, stayed in seat, followed directions, cooperated, etc.**)



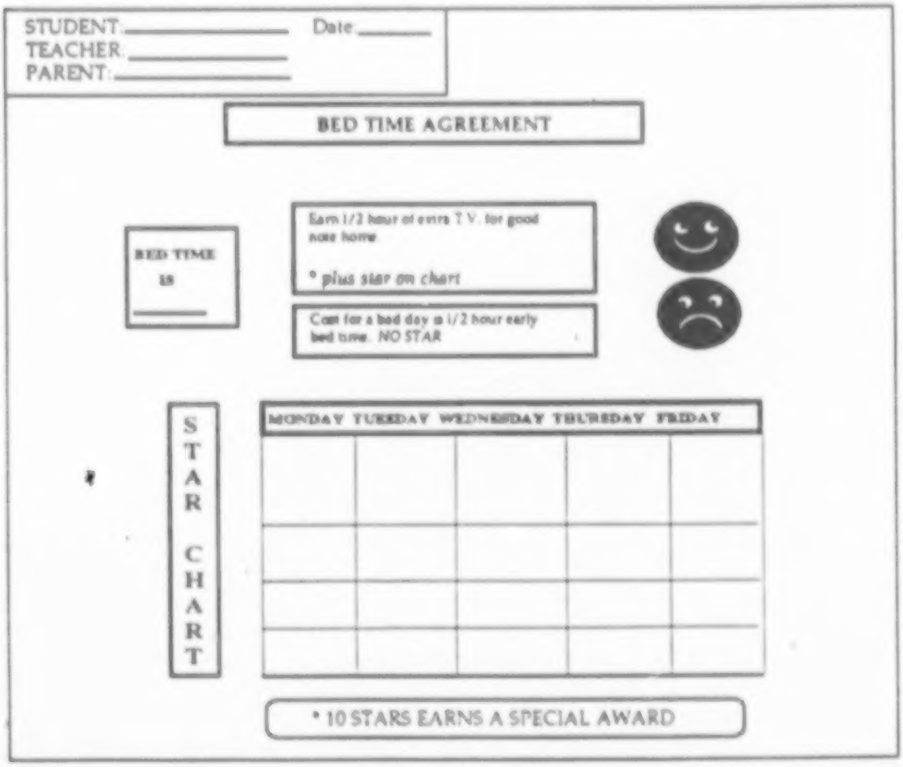
DAILY REPORT CARD

Date ______

______
Teacher

Teacher supply:
Use the **DAILY REPORT CARD** (4 to a page) as shown in APPENDIX

The parent must follow through with the Bedtime Agreement which is self-explanatory.



STUDENT: ______ Date ______
TEACHER: ______
PARENT: ______

BED TIME AGREEMENT

BED TIME IS ______

Earn 1/2 hour of extra T.V. for good note home

* *plus star on chart*

Cost for a bad day is 1/2 hour early bed time. *NO STAR*

STAR CHART

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY

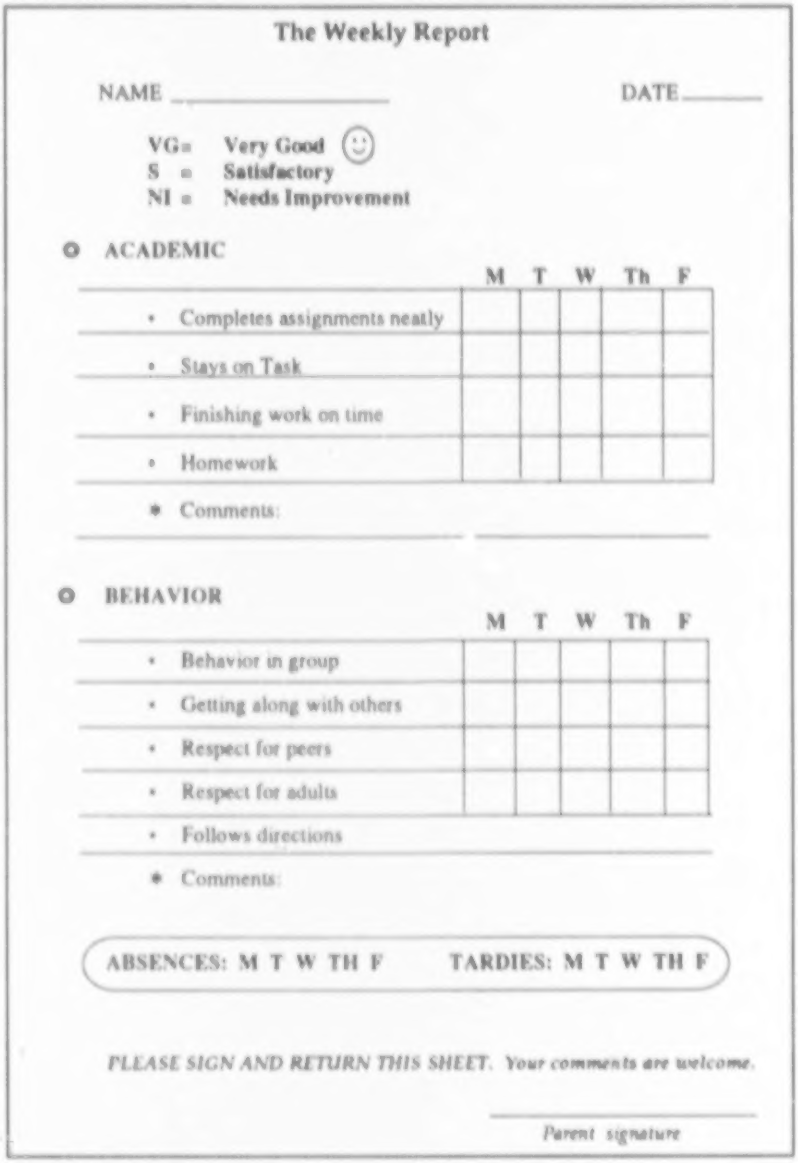
* 10 STARS EARNS A SPECIAL AWARD

B.M. Sample 2:
(all ages)

The Weekly Report

The teacher grades the child (student) on a daily basis on the Weekly Report form shown below. The student takes the report home to parents at the end of the week. Parents are instructed to use backup reinforcements for good reports.

Teacher keeps this form to grade student daily and student brings home weekly. (see APPENDIX)



The Weekly Report

NAME ____________________ DATE ________

VG = Very Good ☺
S = Satisfactory
NI = Needs Improvement

○ ACADEMIC

	M	T	W	Th	F
• Completes assignments neatly					
• Stays on Task					
• Finishing work on time					
• Homework					

* Comments:

○ BEHAVIOR

	M	T	W	Th	F
• Behavior in group					
• Getting along with others					
• Respect for peers					
• Respect for adults					

• Follows directions

* Comments:

ABSENCES: M T W TH F   TARDIES: M T W TH F

PLEASE SIGN AND RETURN THIS SHEET. Your comments are welcome.

____
Parent signature

The ACADEMIC and BEHAVIOR items can be tailored to fit the individual student. Consider the use of happy face stickers in place of VG. Student self-grading with teacher verification is an alternative procedure that help teach self control and is less burden on the teacher.

Assorted Simple Systems

B.M. Sample 3

(elementary level)

This form would be appropriate for one target behavior that occurs more than once a day. The teacher puts stars or stickers in the appropriate boxes when Jason is quiet. The teacher puts an "X" in the box during any period of time that Jason is not quiet.

	Monday	Tuesday	Wednesday	Thursday	Friday
8:30- 9:30					
9:30- 10:30					
10:30- Lunch					
1:00- 2:00					
2:00- 3:00					

Jason's Quiet Chart

This form would also be appropriate for one target behavior that occurs more than once a day. In this case the teacher determined that out of seven things the child has to do during the day, she very seldom completes one. Now, with the chart, the teacher puts a star or happy face sticker over a circle for each completed assignment. The teacher puts an X or a circle for every piece of work not completed. The child brings the card home each day and the parent administers rewards or punishments.

Monday	Tuesday	Wednesday	Thursday	Friday
○ ○ ○ ○ ○ ○ ○	○ ○ ○ ○ ○ ○ ○	○ ○ ○ ○ ○ ○ ○	○ ○ ○ ○ ○ ○ ○	○ ○ ○ ○ ○ ○ ○

The ON-TASK card is used by a Resource teacher to monitor specific TARGET behavior in the regular classroom. The regular teacher specifies the target behavior (e.g., task completion) which earns points (0 to 25) for a period of the day, the whole day for a certain task. The Resource teacher helps the student keep track of points and allows him to cash them in for a reward at the end of the week. This system could also be used to monitor and reward daily school performance by parents at home.

You Were

Not Fair Good Great Fantastic

ON TASK

TARGET

During ____________________

Earned 0 5 10 20 25 points

Signed ____________________

Date ____________________

Bonus ______________ (completed tasks)

This form would be appropriate when the teacher wants to modify several target behaviors, each which occur only once a day. This form could be brought to and from school once a week.

	Monday	Tuesday	Wednesday	Thursday	Friday
Takes time with Math					
Quiet during Reading					
Walks to Lunch					

Eddie's School Behavior Chart

B.M. SAMPLE 4
(elementary level)

THE HOME-SCHOOL MANAGEMENT PLAN

When a student has problems with work habits at school we recommend the use of a Home-School Management Plan. Instead of hounding and nagging a child to get their work done (at home or school), we suggest the use of a positive approach that will improve communication and trust between home and school. We need a simple plan with clear rules and practical procedures that will help keep a student ON-TASK.

INSTRUCTIONS: (For parent and teacher)

1. The teacher, parent and student must all agree upon trying this plan aimed at getting the child to stay "on-task" at school.

2. On-task is defined as:
   Following directions
   Starting the task
   Completing task on time

3. The student will have the opportunity to be acknowledged five times during the school day for being on-task.

   The teacher will use a marking pen or an ink stamp on the back of the child's hand to recognize on-task behavior at the end of each interval of time. If the student was not on-task, tell him/her they didn't earn it and you hope they can during the next opportunity (or time interval).

4. The teacher does not record the number of marks per day unless they want to keep such a record.

5. The parent does records at home on a chart on the refrigerator door the number of points earned per day.

   The parent determines the reward for points earned (5 per day maximum). We suggest some kind of pay-off if a child earns 20-25 points during 5 school days.

⇩

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY

Suggested pay offs:

- Lunch out
- Special outing
- Video or more TV time
- Stay up extra
- Favorite meal
- Friend over for night
- others:

Evaluate this plan (between parent and teacher) after four weeks:
Contnue, discontinue or make changes as needed.

Also, it's okay to communicate what's going on while the plan is being tried. The parent needs to reinforce the teacher for this kind of special effort. The teacher needs to reinforce the parent for following through at home. Both parent and teacher need to reinforce the child for improvements. The key to success with this plan is to give the student the message that the teacher and the parent are going to communicate (monitor).

suppose to do. The problem of non-compliance is probably the number one problem that plagues any treatment approach including medication, diet management, generic strategies, counseling and behavior management. In other words, if the student doesn't get the medication as prescribed or if the student doesn't get a reinforcement when it's deserved-or worse yet-he receives a reinforcement when he didn't deserve it, these are all examples of non-compliance in treatment. Behavior management often fails because of non-compliance. Behavior systems and the principles of behavior management sound simple but often they are too complicated to implement, especially in a large classroom of thirty students.

The literature on child management is full of well designed, practical programs for behavior management at home and at school. The very best programs seem to be the ones that bridge home and school by creating a line of communication between parent and teacher. The aforementioned behavior management samples have been applied successfully to improve student behavior by closely monitoring (and reinforcing) the student at home and at school.

The behavior management systems mentioned above are designed for simplicity in implementation to achieve compliance by the teacher and parent. Note that some of the simple programs described use stars or stickers as symbolic rewards; the happy face stickers ☺ can be purchased in most educational supply stores and some stationery stores for about $2.00 per thousand. There are other more comprehensive and complicated programs that can be effective to increase achievement and/or improve student behavior for an entire classroom or for a specific child. Examples include the following:

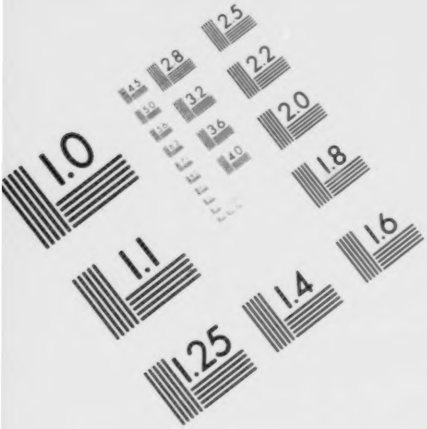
- Token economy systems
- Contract (e.g., behavior, achievement, etc.)
- Contingency Management
- Homework systems (see Parent Training)
- The Family Training Program Manual: The Home Chip System (Barkley, 1981).

The Role of the School Psychologist as a facilitator of behavior management systems

There are two rules that, if followed by the school psychologist, will increase the probability of yielding a positive treatment effect.

Rule 1 – KISS

"Keep it simple, stupid" is a reminder to the school psychologist to "think small." In other words, give the teacher a simple, manageable system that can be reasonably implemented. When it seems appropriate, recommend a "trial" management plan to teacher and parents. For example the initial meeting with parent and teacher prior to assessment would be an ideal time to recommend a simple management plan like those previously discussed. A two or three week trial or a special plan will also serve as diagnos-


1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0

AIIM

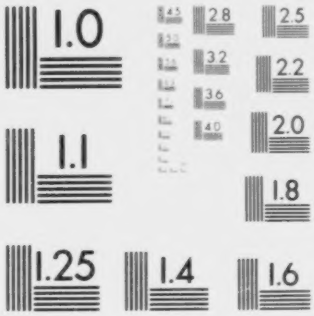
Association for Information and Image Management

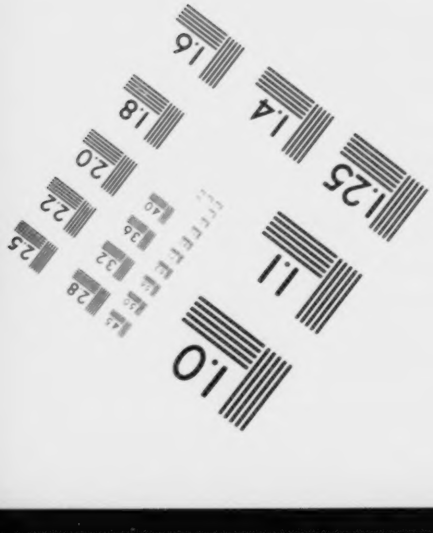
1100 Wayne Avenue, Suite 1100
Silver Spring, Maryland 20910
301/587-8202

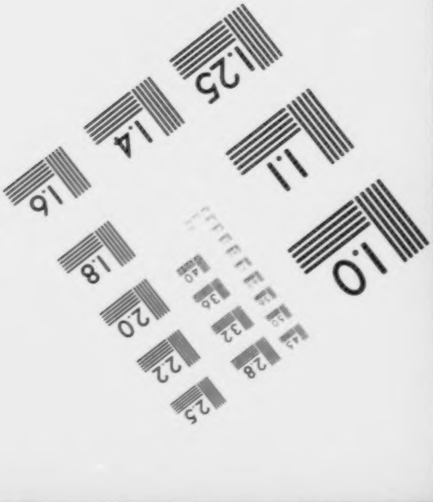
1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0

Centimeter
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
mm
1
2
3
4
5

Inches


1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0


1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0


1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0

MANUFACTURED TO AIIM STANDARDS
BY APPLIED IMAGE, INC.

tic information in determining how well the child responded to a behavioral intervention. A specific method for assessing or testing a child's response to a behavioral intervention in his classroom setting is described in Chapter 2 (Tool #7).

Rule 2 – Monitor the monitors

Another way to say this is reinforce the reinforcers. The school psychologist must reinforce or pay attention to the teacher and/or parent for trying a system and following through appropriately. The school psychologist should monitor or check up on the people who are monitoring the child. The school psychologist can accomplish this task easily by:

a) phone call to the parent
b) note home to parent
c) phone call to teacher
d) note to teacher
e) face to face meeting (if needed)

Pay attention to the teacher and parent for implementing your program; or for at least trying to implement the program. Why? You know.

COUNSELING

TREATMENT WITH COUNSELING

A true ADD child is like a car with faulty brakes. Impetuous, distractable behavior may be difficult to stop or slow down by ordinary means because this child's braking system is in a state of chronic disrepair. We can overhaul the braking system in a car, but for the ADD child we can only attempt to fix the brakes with temporary measures.

Demystification, cognitive coaching, social skill training and behavior management are the most appropriate forms of counseling that can be delivered to the attention disordered student. The school psychologist can incorporate any or all of these techniques into their role or at least be involved in the delivery system for appropriate forms of counseling.

Demystification is the one form of counseling that is essential in the treatment of the ADD child. The school psychologist who really understands attention disorders and how they affect learning and behavior at school is in a key position to educate those involved, especially the child, about this condition.

WHAT FORMS OF COUNSELING ARE APPROPRIATE FOR THE ADD CHILD?

General therapies, including the so called "talk" therapies, are not particularly useful in the treatment of the attention disordered child. The specific techniques involving analysis, play therapy, group therapy and family therapy are not usually recommended as treatment for the ADD child. Sometimes family therapy in conjunction with parent training should be considered with parents of an ADD child where serious problems of interaction are involved; the child appears to be out of control with parents and himself; and the child has serious social problems with aggressivity at school. Several studies have indicated that families of hyperactive children have a higher than average incidence of alcoholism and sociopathy in the males and hysteria in the females (Cantwell, 1972; Morrison & Stewart, 1971). Although the direction of causality is unclear, there is also increased incidence of depression in mothers and marital discord between parents of hyperactive children (Barkley, 1981). How to determine when parent training should be recommended and how this training can be delivered to parents is thoroughly discussed in the section of this handbook that specifically deals with parent training as another form of treatment for the ADD child.

The most appropriate counseling approaches that can be considered for the ADD student include:

- Demystification
- Cognitive coaching or cognitive behavioral therapy (CBT)
- Direct training in social skills
- Behavior management systems that involve treatment for the student which links home and school.

Each of these forms of counseling will be discussed here as they relate to the role of the school psychologist.

Demystification:

Demystification is the most important form of counseling for the ADD child because it should *always* be provided. The school psychologist plays an important role as a demystifier. For example, when we have diagnosed a child with a "learning disability", we actually put that label on the child and try to explain what this condition is, how it can be treated, speculate on possible cause and try to relieve blame. This is how we try to demystify the condition known as a learning disability (i.e., "Your kid's not dumb or lazy. He has a learning disability"). In a similar manner we should also try to demystify ADD.

Demystification is a form of counseling used by a lot of professionals, especially physicians and psychologist. This method of counseling simply involves educating both the child and the parent about ADD, how it impacts school performance, how the child is doing and what needs to be done to help the child. When we talk about counseling the ADD child in the process of demystification, there is no single person that carries out this duty and many people who come in contact with that child can wear the hat of a counselor in demystification, including parents, teacher(s), physician, and even the school psychologist.

Demystification involves a lot of explanation and reassurance to the ADD child. For example, a physician can explain to the parent and the child the nature of an attention disorder in order to demystify the problem symptoms. This is a physiological problem like other childhood condition (e.g., diabetes, seizure disorders, etc.). And, like these other physiological disorders, the physiological treatment (medication) helps them function more normally.

As school psychologists, we have little control over whether or not the physician explains ADD to the parent and child; however, we can have a lot of influence in the process of educating the parent, teacher and child about ADD. It is very important that the school psychologist spearhead the process of demystification about ADD in the school setting. The school psychologist should:

1. Be able to explain the condition to parent, teacher and child.
2. Explain the types of treatment that are needed or those that should be tried.
3. Explain why the treatments are needed.
4. Explain to the child (who is on medication) why it is important to take their medication. For example, "the medicine helps you pay attention better and helps you think before you do things ."
5. Teach the parent and the teacher(s) to constantly reassure the child about their condition.
6. Give the parent and teacher reference material about ADD. For example, see Demystification.

7. Finally, provide inservice to school staff regarding facts about ADD using the Demystification Guide in appendix.

This demystification process is the very same approach used to help parents and children accept other types of problems including diabetes, seizure disorders, learning disorders, etc. If a child has a disorder like those mentioned above, we should not hide the facts from them. They need to know what their problem is so they can cooperate and participate in the treatment.

The demystification process helps the child or student understand their problem and accept treatment for it. If the student is on medication for ADD or if s/he is being tried on it, demystification is crucial. Often the parent and the child do not fully understand why a child should be given a pill to control their behavior. If allowed to draw their own conclusions, the child is simply labeled "bad" and the pill is a magic bullet" that makes him "good". Unless the child fully understands their problem and the need for specific forms of treatment, the child is more likely to have "bad" feelings about himself and resist treatment.

The ADD child needs to receive constant feedback regarding how they are doing with their, hopefully, *former* problem behaviors. This is where behavior management strategies are helpful by giving the student visible and verifiable proof that they are improving and that they are okay. The behavior management strategies that links school and home in the monitoring process of the ADD student is the best feedback system since both parent and teacher can be involved in the ongoing process.

Who actually counsels (demystifies)?

The school psychologist who has diagnosed ADD in a student, then becomes coordinator of treatment and the "chief of demystification". The school psychologists' responsibility here usually involves coaching the parent(s) and teacher(s) to coach the child. If we can get the parent and teacher to explain the child's problem directly to the child, then they will have a better understanding of the problem and the need for treatment. The school psychologist educates the parent and teacher about ADD and the parent and teacher educate the child. The school psychologist should bring up the topic of demystification to the parent and teacher at the post assessment meeting when treatment options are being discussed.

The emphasis in demystification is being "straight" with the student about "their problem." As long as it's accurate, give the child the label; tell them that they have an "attention disorder" or are "hyperactive." Teenagers are often relieved when a name is finally given to their problem and are eager to find out as much as possible about the disorder. It is also helpful with older students to even explain the physiological causes and mechanisms associated with ADD. Bibliotherapy can also be used with older students. For example, the book by Barbara Ingersoll, *Your Hyperactive Child: A Parent's Guide to Coping with Attention Deficit Disorders* could be appropriate for many teenagers as a source of information. There are numerous booklets about ADD like those written by Larry Silver, M.D. which are distributed free of charge from Ciba Pharmaceutical Company, 556 Morris Avenue, Summit, New Jersey 07901.

In order to explain ADD to a younger child, consider the following elements:

1. Younger children can usually understand an analogy as an explanation of ADD. For example, a high performance car will not perform satisfactorily unless it has good brakes. You could discuss the child's problem by analogy in the following manner:

School psychologist: "What is your favorite car?"

Student: "I like the BMW."

School psychologist: "That's a good car; probably one of the best. What color do you like?"

Student: "Red."

School psychologist: "You're a lot like your red BMW. It looks great and goes very fast. Suppose the only problem with the red BMW is that it doesn't have good brakes. What's going to happen to this car if the brakes don't work and it has to stop?"

Student: "It's going to crash!"

The counselor should explain to the child that their brain is just like a super car, but in order to operate properly, everything has to be working right–especially the brakes. A car with faulty brakes that goes too fast will eventually have accidents. It will be necessary to further elaborate to the student how their problem behaviors at school (associated with the symptoms of ADD) is very much like a car without brakes to stop it.

This analogy can be very helpful when we need to explain to the child why they need to take their medication to operate effectively. This analogy also applies to the explanation of why diet management is related to brain function and behavior.

2. Children don't like to be different from their classmates even though their car needs "super" and others can operate on regular. It is helpful to tell the child that s/he is not the only one with the problems of ADD. Younger children don't always understand percentages but they can understand that almost every classroom has in it a child who also has an attention disorder.

3. I think it's a good idea to emphasize to the ADD child the element not related to their problem. We need to dispel any possible misconceptions the child might have about himself. "The tests that you took clearly show that you are not stupid or crazy. As a matter of fact, the results show that..."

4. Tell children about eminent people who have had ADD like Thomas Edison, Winston Churchill and Huey Long. You don't have to emphasize the fact that there have been a lot infamous criminals that were also ADD (i.e., Type 1). It is suggested that some children with ADD enjoy reading biographies of famous people who had similar problems as children. Reading about people who have overcome the difficulties of ADD can help both the parent and child maintain a positive attitude toward over coming these problems (Ingersoll, 1988).

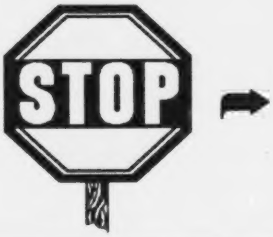
Cognitive Coaching

Cognitive Behavioral Therapy (CBT) or cognitive coaching is a form of counseling that has been specifically developed to treat the ADD/Hyperactive child. The primary focus of cognitive coaching has been to teach children with attention disorders strategies for self-regulation, i.e., to actually talk to themselves in order to guide their behaviors. As a school psychologist, you may have seen children who have learned on their own to think out loud to talk themselves through a task; this is a self-taught compensatory skill.

In cognitive training, children are taught to first "think out loud" so that their internal monologs can be monitored and modified by the counselor or therapist. As they progress, they are encouraged to convert their out loud talking into quiet thinking so that their talking doesn't disturb others. Cognitive coaching usually involves several additional ingredients to maximize both the occurrence and the impact of self-instruction. These include the following techniques:

1. Modeling
2. Problem attach strategies
3. Techniques for detecting errors and generating alternative solutions
4. Overt and covert rehearsal
5. Goal setting
6. Self-appraisal and self-reinforce ment
7. Positive reinforcement from the coach
8. Response cost

Most problems in cognitive coaching present multipurpose packages that contain conventional behavioral and tutorial ingredients as well as specific cognitive-behavioral components; therefore, the cognitive coaching approach consists primarily of educational training in conjunction with behavioral techniques with a cognitive overlay.



**"Think...
and listen."**

Cognitive Behavioral Therapy Questions

Teach the child in a counseling relationship to approach a problem analytically by asking themselves these specific questions:

1. "What is my problem?"
2. "What is it I have to do?"
3. "How can I do this?"
4. "If it doesn't work, what can I do?"
5. "How am I doing?"
6. "Am I following my plan"
7. "Did I check everything for careless mistakes?"

One of the most recent CBT approaches has been developed by Kendall, (1988). Kendall's approach employs the use of a workbook called the Stop and Think Workbook which the student uses to help themselves learn self-control and reduce impulsivity. This approach could be used in a clinic by a therapist or in the school setting by the school psychologist or the special education teacher or a school counselor. CBT has been tailored for the attention disorder child by teaching and/or coaching the child to gain control over their own problematic symptoms associated with ADD (i.e., especially distractibility and impulsivity).

Does CBT Work?

The cognitive coaching approach was initially thought to be the method for helping the ADD student that would replace medication. Unfortunately, the results of CBT have not been satisfactory according to some of those who have been most involved in developing and testing cognitive training problems for ADD children. After ten years of research, "the results are very discouraging," concludes Dr. Abikoff. At the conclusion of their sixteen-week cognitive training program for fifty hyperactive youngsters, Doctors Abikoff and Gittelman (1985) found that cognitive training did not reduce the children's need for stimulant medication, nor did it result in improved classroom behavior or gains in academic productivity or achievement. Social behavior was similarly unaffected, despite eight weeks of training specifically devoted to teaching the children how to resolve social problems.

*I*n another CBT program conducted at the University of Illinois (Chicago) the researchers have concluded that the results were far below expectation (Brown, 1985).At this point, the evidence regarding cognitive training seems to clearly indicate that it cannot be used to the exclusion of other known effective treatment (i.e., medication). Again, as with behavior management, the effectiveness of cognitive training increases significantly when combined with an effective treatment like medication.

Social Skill Training

*I*t's a well known fact that the ADD child is at risk for social behavior problems at school. Often these children enter school with several years of experience in destructive social interaction. The description of family dynamics that follows is covered in more detail in the "Treatment with Parent Training" section of this book. Because of the ADD child's incapacity to sustain attention and compliance to instruction, they will receive a disproportionate share of reprimands, criticism, punishment, teasing and ostracism from their parents starting at the toddler stage, if not earlier. Therefore, ADD children are far more likely to acquire and display behaviors which allow them to escape or avoid situations which make excessive demands on their limited attentional and self-control capabilities. Some of the inappropriate coping behaviors that the ADD child learns as a preschooler (e.g., whining, temper tantrums, ignoring, refusal, defiance, hostility, destructiveness, verbal aggression, physical aggression) to successfully get parents to withdraw their demands are later tried in school. Inappropriate social behaviors, inattentiveness and impulsiveness make the ADD child appear rather immature in comparison to classmates. I think that the impulsive nature of the ADD child is what really creates social problems in the school setting. These kids are often very unpredictable in their behavior an other kids don't want to be around them. These children cannot pay attention but they desperately want the attention of others and they simply don't know how to get attention appropriately. The end result for the ADD child is poor social skills.

*S*everal packaged programs are available that attempt to teach social skills to children that are under-socialized. The ADD child is a likely candidate for such a program. The school psychologist who has the opportunity to provide individual or group counseling to students could provide a much needed service to the population of students with social problems.

*T*he Walker Social Skills Curriculum is one program in particular that fits well into the role of the school psychologist or school counselor. At the elementary level, the ACCEPTS Program is the part of the Walker curriculum that is designed for use by teachers or support staff to teach social skills. The ACCEPTS Program can be taught in one-to-one, small group or large group. The information provided here about the ACCEPTS Program is based upon testimony from a school psychologist who has used the program. Without knowledge of the effectiveness of Walker curriculum, it appears to be based upon task analysis which is a very sound approach to instruction. For example, one component of the ACCEPTS program involved teaching "basic interaction skills" which include the skills of eye contact, using the right voice, starting conversation, listening, answering, making sense, taking turns, questions and continuing.

At the secondary level, the Walker Curriculum is called the ACCESS Program which is the acronym for Adolescent Curriculum for Communication and Effective Social Skills. The ACCESS Program is designed for the middle and high school level. The program teaches peer-to-peer skills, skills for relating to adults, and self-management skills. Social skills should be taught in the setting where the need is most evident–the school. In my experience, the programs that attempt to teach social skills in a clinic do not actually teach skills that transfer or generalize to the school setting. Any program that attempts to teach social skills in the school setting could be appropriate instruction for the ADD student.

Behavior Management

Behavior management is considered a counseling technique so it should be mentioned under counseling the ADD child. This technique is so important to the ADD child, the parents of the ADD child, and the role of the school psychologist, that there are two other complete treatment sections in this text devoted to behavior management.

1. Behavior Management as a classroom system

2. Parent Training in behavior management

Also, cognitive behavioral therapy (CBT) incorporates behavioral techniques in its counseling therapy. For example, Kendell's workbook approach has all the elements of other CBT counseling programs including a point system where the student earns points for performance and loses points for non-performance.
Behavior management is a very important form of treatment for the ADD student that virtually permeates all other forms of treatment, including counseling.

The Role of the School Psychologist in Counseling the ADD Student

A true ADD child is like a car with faulty brakes. Impetuous, distractable behavior may be difficult to stop or slow down by ordinary means because this child's braking system is in a state of chronic disrepair. We can overhaul the braking system in a car but for the ADD child we can only attempt to fix the brakes with temporary measures.

There are various approaches to counseling the ADD child that may be appropriate but none of the techniques that are mentioned in the literature can bring about a cure. All of the counseling approaches that can be used to provide effective treatment for the child should be thought of as supplementary or adjunct to other forms of treatment. For example, if a child responds well to medication, the various approaches of counseling seem to be maximally beneficial. The results of the research on the effects of counseling support the thesis that treatment combinations work best. Demystification, cognitive coaching, social skill training and behavior management are the most appropriate forms of counseling that can be delivered to the attention disordered student. The school psychologist can incorporate any or all of these techniques into their role or at least be involved in the delivery system. For example, cognitive coaching, social skill training and behavior management systems are all available in commercial programs designed to be implemented in the school setting by teachers and specialists. The school psychologist can be the direct deliverer of services or can assist and supervise other professionals to implement these same programs.

Demystification is the one form of counseling that is essential in the treatment of the ADD child. The school psychologist who really understands attention disorders and how they affect learning and behavior at school is in a key position to educate those involved, especially the parent and child.

MEDICATION

TREATMENT WITH MEDICATION

Barkley states it well:

> Stimulant drugs are a highly effective therapy for the management of hyperactive and disruptive behavior. These drugs appear to have their primary effects on attention span and impulse control, perhaps because of their ability to energize inhibitory brain mechanisms. Changes in other behaviors seem to be the result of these improvements in attention and impulsivity. Children who receive stimulants tend to show improvements in their play, social conduct, and compliance to commands and rules; these result in a lessening of supervision, reprimands, commands, censure, and punishment from those adults who must frequently interact with them. Despite these behavioral changes, medication causes little improvement in the academic achievement or performance of hyperactive children, nor is their long-term outcome altered appreciably by drug use during childhood. While these drugs are highly effective in improving the day-to-day management of hyperactive children, other treatments are required if the goals of therapy include the improvement of academic achievement as well as that of long-term social adjustment.
> (Barkley, 1981, p.228)

MEDICATION AS A TREATMENT FOR ADD

Medication used in the treatment of the attention disordered child is undisputably the most effective intervention, yet it remains the most controversial intervention; this seems to be the real paradox in the use of stimulant medication for the ADD student. All the issues related to drug treatment for ADD children that will be discussed here are also discussed in detail in Russel Barkley's book Hyperactive Children,(1981). Chapter five in Barkley's book is an excellent source for anyone interested in obtaining more practical information about drug management for the hyperactive (ADD) child.

There are literally hundreds of published studies (i.e., over 500 as of 1990) that have examined the effects of drug treatment on hyperactive and ADD children. Summaries of some excellent review of stimulant drug therapy are available in Barkley, 1981; Cantwell and Carlson, 1978; Conners, 1971; Eisenberg and Conners, 1971; Ross and Ross, 1982; Safer and Allen, 1976; Sprague and Werry, 1974; Whalen, 1982; Gadow, 1986.

While medication does not seem to enhance academic achievement, *per se*, for the ADD child, there is considerable evidence that work habits and social behavior are significantly improved for dysfunctional children due to medication. Numerous studies have evaluated the beneficial stimulant effects in ADD children's classroom performance. Reductions in impulsivity and increases in sustained attention manifest themselves most clearly in the classroom as decreases in classroom disruptiveness and increases in on-task behavior. Relative to unmedicated ADD children, those receiving stimulants are less likely (a) to talk out inappropriately in class, (b) to bother peers who are working, (c) to violate classroom rules or engage in other behaviors that require teacher attention, and (d) to interact aggressively and otherwise inappropriately with peers. These changes have been reported in a very large number of studies and are clearly evident whether children are observed directly or rated by their teachers. Instead of engaging in these behaviors, medicated children spend more time behaving appropriately, such as being on task in the classroom and completing more of their assigned academic work, often with increased accuracy (Pelham, 1987).

In keeping with the theme of this book, the emphasis on the role of the school psychologist will be presented in relationship to the process of treatment for the ADD child with medication. This section will also include the topics of the various medications used (effects and side effects); contraindications, effects on specific sub-groups (i.e., preschoolers, adolescents and the mentally retarded); brain biochemistry; when medication should be considered; controversial issues; and the specific role of the school psychologist in the treatment process with medication.

The Medications Associated with the Treatment of ADD

Primary medications: Pediatricians, psychiatrists and neurologists who work with ADD children can prescribe stimulant medications like Ritalin, Dexadrine and Cylert. Ritalin and Dexadrine are medications used to treat attention disorders in children and adults, narcolepsy (a sleep disorder of adults) and treatment-resistent depression in adults. Their effects on the nervous system are similar to norepinephrine, a naturally occurring chemical (neurotransmitter) found in the brain. Like pemoline (trade name Cylert), methylphenidate and dextroamphetamine lessen distractibility, improve concentration and in some children improve perceptual-motor abilities. Attention disordered children are better able to organize their actions and are less impulsive (Coleman, 1988). Tricyclic antidepressants (TCA) and the major tranquilizers (neuroleptics) represent two other classes of drugs that are occasionally used in the treatment of ADD when the stimulant medications are not effective or when the stimulants are contraindicated. All the medications discussed here are summarized by trade name and classification in Figure 12.

Since these medications are frequently prescribed to help children function in school, the school psychologist should have a working knowledge of their use, effects, side effects, and contraindications.

Ritalin (Methylphenidate hydrochloride) Is usually the drug of choice for ADD children. The starting dose is usually .03mg/kg. Serum levels can not be monitored at this time (clinical observation is the only way to measure its benefits and side effects). State law requires standard prescription that must be filled within 3 days. Only 1 month's supply may be given at one time and no refills can be obtained without a written prescription. Effects become evident within 30 minutes for most children and last 3-4 hours. Side effects are listed above. The medicine should not be used in psychotic children or in children that are taking MAO inhibiters for depression.
Tablets 5 mg, 10mg, 20mg.

Dexedrine (dextroamphetamine sulfate) This is the second most commonly used drug for ADD children. It has the same side effects as Ritalin. Serum levels cannot be measured. State law requires a special prescription that must be filled within 3 days. Only 1 month's supply may be given at one time and no refills can be obtained without a written prescription. Effects become evident within 30 minutes and medicine should not be used in psychotic children or in children that are taking MAO inhibiters for depression.
Tablets 5mg, Elixir 5mg/5ml
Time-released (Ritalin SR and Dexedrine Spansules) Time released medi-

MEDICATIONS USED IN THE TREATMENT OF ADD

(Listed in the order of application in the treatment of ADD)

	Trade name	Generic name	Usual dose range
1. Stimulant medications	Ritalin *	Methylphenidate	5 mg - 40 mg (0.3 mg - 1 mg/kg)
	Dexedrine *	d-Amphetamine	2.5 mg - 30 mg (half ritalin dose)
	Cylert	Pemoline	7.5 mg - 75 mg (.5 mg - 2 mg/kg)

* Both are now available in slow release forms to extend usual length of actions beyond 3 - 4 hours.

	Trade name	Generic name	Usual dose range
2. Tricyclic antidepressant (TCA)	Tofranil	Imipramine	25 - 200 mg
	Norpramine	Desimipramine	25 - 200 mg
3. Major tranquilizers (neuroleptics)	Mellaril	Thioridazine	10 mg - 40 mg+
	Thorazine	Chlorpromazine	10 mg - 400 mg+
	Haldol	Haloperidol	0.5 mg - 30 mg
	Stelazine	Trifluperazine	1 mg - 40 mg
Miscellaneous	Catapres	Clonidine	.05 mg - 2 mg
	No-dose	Caffeine (coffee)	100 mg/cup of coffee 50 mg/can of caffeinated soda 100 - 300 mg

Others not specifically for ADHD but commonly used medications with special education/ADHD children:

Anti-convulsants	Dilantin	Diphenylhydontoin (DPH)
	Tegretol	Carbamezepine
	Mebaral	Phenobarbital
	Zarontin	Ethosuximide
	Depakase	Valproic acid
	Clonazepam	Klonopin
Miscellaneous	Lithobid	Lithium carbondate (manic-depressive symptoms)

Figure 12. Medication used for Attention Disorders

cations have an average effectiveness of six to eight hours. Many adolescents prefer to use these medications because of their hesitancy to take medication while at school. Unfortunately, time released medications are often less effective than their non-timed equivalents. Parents must weight the advantage of a once a day dose against a possible decrease in effectiveness. Because there is no economical way to measure blood levels of stimulant medication at this time, behavior must be monitored closely when switching from one type of medicine to another.
Dexedrine spansules 5mg, 10mg, 15mg
Ritalin SR 20 mg capsule

Cylert (Pemoline) Another available stimulant medication is Cylert. This is a medicine that has been particularly effective for some adolescents. It has the advantage of being effective for 24 hours and is given one a day. The disadvantage is that it takes several weeks to determine if it is going to be effective. Most physicians feel that it has not been as beneficial as Ritalin or Dexedrine in the management of ADD. This medication also requires that blood tests be done periodically to monitor liver and blood toxicities.
37.5 chewable
17.25mg, 37.5mg, 75mg capsules

Antidepressants. Tofranil (imipramine) is effective in treating depressed children who have trouble with concentration. This medication is not as effective in the general ADD population as stimulants and requires monitoring for liver, blood and heart toxicities. The dose should be less than 2.5mg/kg in children. Effects might not be noted for 1-3 weeks.
Tablets 10mg, 25mg, 50mg

Other medications:

Antihypertensive medication. Clonidine has been found to decrease activity levels in some adult hypertensive patients. It has been found to be effective in increasing ability to focus attention in certain children with ADD. It is the medicine of choice for children who have Tourette syndrome and attentional problems. However, it is less effective than the stimulant medications for most ADD children. Only about 30% of the children tried on this medication have a positive response and the medication is expensive.

Anticonvulsants. Anticonvulsants have been shown not to be effective in children with ADD. Many children have been placed on these medications when they have a slightly abnormal EEG. If the child has no seizure activity, anticonvulsant therapy should not be used.

Major tranquilizers. Medicines such as Thorazine, Stelazine, etc. are utilized in children who have severe emotional disorders. They have no use in the typical ADD child.

Possible side effects associated with stimulant medications:

Each child is a different biological factory, and the same medication can react differently in each individual. The list of possible side effects to stimulant medication is long and scary. *The majority of children have no side effects to the medication. Usually, any side effects that develop can be eliminated or minimized by changing the medication or the dosage.* A school psychologist should be familiar with the possible side effects listed below:

1. Common Short-term Side Effects. For the first few days of treatment with stimulant medication, many children experience headaches, dizziness, dry mouth, constipation stomach aches, and a "funny feeling". None of these side effects are severe and they usually pass within a week. If the symptoms are severe or do not disappear within a short time, the medication should be stopped and the physician notified. Use the teacher questionnaire for medication side effects each week after medication has started (see Appendix).

2. Loss of Appetite. All of the stimulant medications can produce a decrease in appetite. Thin children seem to be more susceptible to this side effect than overweight children. Sometimes overweight children actually eat more on medication.

3. Decrease in growth velocity. Some ADD children have a decrease in expected height at the end of one year on medication. This effect seems to be related to the dose of medication. Children receiving less than .8mg/kg of Ritalin seem to experience little or no effect on height.

4. Insomnia. Some children using stimulant medication have trouble getting to sleep at night. This is understandable because the medication is a stronger stimulant than coffee. Most children do not have problems with getting to sleep or actually sleeping better. Medication seems to help some of these children calm down so that they can relax and fall asleep faster. Sleeping patterns should be monitored closely because lack of sleep can aggravate ADD problems.

5. Heart Rate. Stimulant medication increases the heart rate by five to ten beats per minute. It is not known whether this has a long-term effect.

6. "Zombie-like" State. When started on medication, some children become very lethargic and appear to be in a stupor. This effect usually subsides within one or two days and is equivalent to the sleepiness that some people experience when initially taking cold remedies. Other children continue to have problems. These children seem to be over sensitive to medication and respond well to decreasing the medication. If this occurs, the physician should be notified and the dosage adjusted.

Serious side effects that warrant an immediate revisit with the doctor:

1. Allergies. Medication should be stopped if the child develops a hive-like rash. This could represent an allergy to the medication and the physician should be contacted.

2 .Precipitation of Tourette Syndrome. Tics and Jerks. Medication should not be used in children who have major motor tics or who have a family history of tic disorders. This is because medication can aggravate the tics. Tourette syndrome is an inherited disorder that causes serious problems. Initially, the syndrome appears in childhood as an inability to focus attention. Over a period of years, the attention problems worsen and the children develop tics such as uncontrollable jerking of the

face and shoulder. This is often followed by verbal tics (caprolalia) where people utter unusual sounds, such as grunts, barks or swearing. Some practicioners are currently treating ADD and Tourette with medication used simultaneously for each disorder (e.g., Ritalin and Halodol).

Most physicians feel that medication does not cause Tourette syndrome, but that it could lead to an earlier onset of symptoms in those children predisposed to the disorder. If any motor tics develop in children on medication, the medication should be stopped at once and the physician notified. In most cases, once the medicine is stopped, the tics also disappear over a period of several months.

3. Dysphoria. Some children who are placed on medication seem to have a significant mood change. They seem irritable, unhappy, and emotionally flat. If this persists, the child becomes depressed and has problems socially and educationally. Most of the time, this condition is easily corrected by changing the stimulant medication or the dosage that is being used. The physician should be notified so that appropriate changes can be made.

Contraindications:

In general, children with a history of tics, Tourette syndrome, thought disorder or psychosis should not be given stimulant medications; for these often exacerbate the symptoms of such disorders. Children with high levels of anxiety are also likely to respond poorly to these drugs. Furthermore, children under 4 years of age are poor responders to medication. There is very little research on drug effects and side effects in this age group. There is some controversy over whether stimulants should be given to children with seizure or epilepsy; doubts about the practice are based on the possibility that the stimulants may lower seizure threshholds. This phenomenon is rarely seen clinically, however, and it can be avoided by a slight increase in the level of anticonvulsants. Since many epileptic children are hyperactive, the stimulants can be useful in their management if the drugs are judiciously prescribed.

The stimulants can alter the actions of other drugs, though such interactions are often not clinically serious or significant. The stimulants may antagonize the effects of hypnotic drugs and may also increase their toxicity in overdosage. In addition, the stimulants have been shown to heighten the activity of antidepressants and monoamine oxidase (MAO) inhibitors. Interestingly, the use of thioridazine in one study was shown to enhance the effects of mehtylphenidate. The stimulants may also decrease the efficacy of anticonvulsant drugs, although this remains to be empirically demonstrated. In general, the stimulant drugs have few, if any serious interactions with other drugs.

Medication effects on specific subgroups

Dulcan (1987) neatly summarized the treatment with medication on specific subgroups including preschoolers, adolescent students and the mentally retarded; this information is very relevant to school psychology.

Preschoolers. ADD with hyperactivity is often identified prior to age six, but the pharmacological treatment of young children is controversial. In two double-blind studies using methylphenidate vs. placebo in 3 to 6 year olds identified as hyperactive, the clinical efficacy of methylphenidate was found to be more variable than in groups of other children. There was a higher incidence of side effects, especially sadness, irritability, and clingyness, along with insomnia and anorexia (Conners, 1975; Schleifer, Weiss, Cohen, Elman, Cvejic, & Kruger, 1975). ***Stimulants should be used in this age group only in the most severe cases or when parent training and placement in a highly structured, well-staff preschool program have been unsuccessful or are not possible.***

Adolescents. Only in recent years has stimulant medication been considered for adolescents, as follow-up studies have dispelled the myth that children "grow out" of hyperactivity at puberty (Weiss, 1985), and efficacy in this age group has been demonstrated (Varley, 1985). Major concerns with adolescent populations include possible growth retardation, abuse of medication, selling or giving pills away, and increased sensitivity to peer opinion, leading to increased reluctance to take possibly stigmatizing medication. Careful preparation of the adolescent and family, and sensitivity to situations in which medication is dispensed, may improve compliancy. Pharmacotherapy may be less problematic for adolescents who have been on medication prior to puberty than for those who have not been diagnosed and treated earlier. Pemoline would seem to be the drug of choice for many adolescents, due to less evidence of growth retardation, lower abuse potential, and decreased need for a dose during the school day. On the other hand, a youngster who has been doing well on methylphenidate or dextroamphetamine should not be automatically switched to pemoline just because he or she reaches puberty.

Mentally Retarded Individuals. The evaluation and treatment of children with mental retardation is especially complex, and many studies of the use of stimulants with mentally retarded patients have been with severely impaired institutionalized populations. The existing evidence indicates what when used for target symptoms of ADD, the therapeutic benefits of stimulants extend to the mentally retarded. It appears, however, that the extent of clinically significant improvement decreases with decreasing I.Q. (Gadow, 1985).

ADD and Brain Biochemistry:

This topic is probably useless technical information for a school psychologist (it is to me), but if you are interested in the precise proposed dynamics of ADD brain dysfunction and how medication really "treats" this dysfunction, then keep reading. You could say that the ADD child has "neurojuice insufficiency" and that stimulant medications act on those neurojuices to produce increases in attention with corresponding decreases in distractibility, impulsivity and hyperactivity. A more technical description of the biochemical effects of stimulant medication on the ADD brain is offered by Dulan, (1986). The effects of Ritalin and Dexadrine are compared: Both Dexthoamphetamine (Dexadrine) and Methylphenidate (Ritalin) improve brain function for ADD children with similar results by only slightly dissimilar means. Dexadrine is thought to potentiate both dopamine and norepinephrine via stimulating release of newly synthesized dopamine into the synatpic cleft, inhibiting presyneptic reuptake and inhibiting monamine oxidise. On the other hand, Ritalin acts by releasing stored dopamine from reserpine-sensitive presynaptic vesicular pool, decreasing dopamine reuptake, inhibiting monomine oxidose, and perhaps also by direct post-synaptic action.

The precise neural mechanisms of the stimulant's effects in humans are as yet unknown (Silver, 1988). They are presumed to enhance broadly the effects CNS neurotransmitters (the catecholamines-dopamine and norepinephrine) by increasing their availability at the synapse. Whether the various stimulants share the same neurochemical mechanism is also unknown. Some children respond positively to one stimulant and not to the other two, implying that the drugs may have different neurochemical mechanisms that interact with individual differences in brain biochemistry (Pelham, 1987). Again, the main idea is that stimulants improve the function of some faulty mechanism in the brain that ultimately affects the symptoms associated with an attention disorder.

Although at one time, stimulant effects on ADD children were thought to be different from those that would be obtained with normal children (thus the old notion of the paradoxical effect), it is now clear that stimulants affect normal children and adults in the same manner that they affect ADD children (Rapoport, Buschsbaum, Weingartner, Zahn, Ludlow & Mikkelsen, 1980). Specifically, on a variety of measures, the drugs increase activity or arousal in the CNS. How these changes in CNS activity are related to changes in ADD children's behavior is not well understood.

First resort or last resort?

Historically, the diagnosis of ADD or Hyperactivity brought with it the treatment (and often sole treatment) with stimulant medication. Even today we are still faced with the fact that the ADD syndrome and treatment with medication remains controversial. Some of the reasons the controversy continues may be due to the following factors:

There is

- No specific test to diagnose ADD like there is for diabetes or seizure disorders.
- There are no standard diagnostic procedures, i.e., DSM criteria would probably apply to one third of our school-aged population and this is obviously faulty.
- Because of the above two factors, there is a high chance of misdiagnosis, i.e., false positives.
- There is a lot of media attention on ADD, probably due to the misdiagnosis factor and with the arbitrary and often automatic use of drug treatment.
- There is a fear of using drugs in our "drug sensitive" culture because of concerns over possible addiction

and/or harmful side effects.

- ➡ "Using drugs to control children's behavior" doesn't sound very appropriate to a lot of people. (However, this over-simplified notion doesn't sound as bad when we are talking about a seizure disorder or diabetes).
- ➡ Too often, drug treatment is the only method of treatment offered to the parent before attempts at other interventions; this is probably a very legitimate complaint.

The controversy may continue, but another fact is also evident: the best, single treatment for a true ADD is stimulant medication with a 70-80% effective rate (Barkley, 1981).

When do we consider medication as a treatment for ADD?

There is no test to tell us whether or not to consider medication as a treatment for the symptoms of ADD. There are several important questions that should be answered before we recommend that medication be considered if we want to avoid the trial and error method. The first and foremost question to answer is: "How is this student doing in school?" Pediatricians don't ask this question enough when a possible ADD child is presented to them. The medical people may ask the parent this question, but the school people are often not consulted. To reiterate, the school psychologist, as a fairly objective observer, is in the best position of all professionals to respond to this question of how the child is doing in school. Our main role in the school setting often revolves around the asking and the answering of this simple question. The primary objective of the psychoeducational assessment is also an attempt to answer this question.

There are a few other questions for a school psychologist to ponder when considering medication as a treatment along with other forms of treatment:

- What seems to be causing these symptoms?

- How severe are the symptoms at school?
- How severe are the symptoms at home?
- Are these symptoms pervasive or situational?
- Does this child get along with other students?
- Are there significant learning problems?
- What is the parents' attitude about medication?
- What is the pediatrician's attitude about medication?
- How successful have non-medical forms of treatment been?

Barkley (1981), has outlined some sound fundamental rules that apply to the process in making a decision to use medication, (see figure 13).

Considering Medication: The Role of the School Psychologist

All of the important decisions regarding the use of medication for the school aged child are rarely done systematically by the physician. Usually, parents are prompted to seek a medical

MEDICATION: FACTORS TO CONSIDER

1. How old is the child? Drug treatment if often not recommended below 4 years of age, except in unusually severe cases.

2. Have other therapies been used? If this is the family's first contact with the physician or other professionals, drugs should be avoided if possible until other therapies have been tried. I typically ask that the parents go through the child management course before medication is prescribed, if this is their first effort at seeking help. However, when the child's behavior is a severe problem and the family cannot participate in the child management course or that of any other professional in the community, drugs may be the only useful alternative.

3. How severe is the child's current behavior? In some cases, the child's behavior is so unmanageable or distressing to a family that drugs may prove the fastest and most effective way of dealing with the crisis until other forms of treatment can begin. Once the other therapies are making sufficient progress, some effort can be made to reduce or discontinue the medication.

4. Can the family afford the medication, follow-up visits, and so on?

5. Are the parents sufficiently intelligent to supervise the use of the medication adequately and guard against its abuse? Solomons has suggested that some parents will juggle the dose of medications, despite cautions to the contrary while others may in fact abuse a child through overmedication.

6. In spite of "prodrug" answers to all of the foregoing questions, some parents are simply "antidrug", and such parents should never be coerced into agreeing to try medication. Such parents will often sabotage the drug trial through underuse of the drug or underreporting of its efficacy, just to prove the physician wrong.

7. Is there a delinquent sibling or drug-abusing parent in the household? If so, Solomons suggests that medication not be prescribed as it may be redirected for ilicit use or sale.

8. Does the hyperactive child have any history of tics, psychosis, or thought disorder? If so, the stimulant drugs are contraindicated.

9. Is this child highly anxious, fearful, or more likely to complain of psychosomatic disturbances? Again, medication is contraindicated.

10. Does the physician have the time to monitor these medications properly? Unlike many other drugs, the stimulants require judicious prescribing and careful monitoring, for which the physician must allot sufficient time. If this is not possible, the family should be referred to another physician who can monitor the medication. (The school psychologist can help here)

11. How does the child feel about medication and its alternatives? With older children, it is important that the use of drugs be discussed with them and its rationale sufficiently explained. In cases where children are "anti-drug" they may sabotage efforts to use it by not swallowing the pill when it is given or by other means. Carol Whalen has also shown that children's views on the origins of their problems and their ability to control them can affect drug responding.

12. Has the child had an adequate physical and psychological evaluation? Stimulants should never be prescribed if the child has not been seen or if the child has only been briefly examined in the office, except in very rare instances when a crisis in the behavior of the child or in family relations has occurred. A thorough physical exam, particularly of heart rate, pulse, blood pressure, and growth patterns in height and weight, should be administered before treatment is initiated.

from Barkley, 1981

Figure 13. Medication factors to consider

intervention at the insistence of school people; the physician then prescribes medication (or does not) based on his or her knowledge and beliefs regarding the role of stimulants in treatment of ADD. Only rarely does the physician obtain information systematically about the child from the setting that initiated the referral–the school. A starting dose is selected and increases are made based on parental reports until optimal drug response is presumably obtained and no adverse side effects are apparent. Again, lack of contact with the school is the norm (Gadow, 1981); this is fairly standard procedure in pediatric medicine. The school psychologist plays a key role in every aspect of the process when medication is being considered as a treatment for the ADD child.

1. At the preliminary level, a thorough assessment of the child as delineated in Chapter 2 is coordinated by the school psychologist. The importance of an accurate diagnosis is crucial with the ADD child because medication is often the immediate treatment consideration. If a child is misdiagnosed as ADD (i.e., Type 4 or Pseudo ADD), stimulant medication could be a very poor choice of treatment. If the student is not ADD, or if the diagnosis is uncertain, the school psychologist should steer away from any early interventions that include medication as a form of treatment.

2. Also, at the diagnostic level, when ADD symptoms are present and there are positive indications of "true" ADD, the school psychologist plays a very important role in defining the severity of the problem in terms of (1) learning rate; (2) extent of problematic symptoms; (3) work habit problems, and; (4) social behavior problems. If there are significant problems in these areas, then medication should be discusssed early with the parent as a form of treatment for the child.

   The message you send to parents about the effectiveness of medication depends upon your past experiences with children on medication, your knowledge about attention disorders, and your own beliefs about the efficacy of the various treatment options of treatment combinations that may be appropriate for this particular child.

3. Demystification: ADD and medication. The form of counseling known as demystificaion starts at the post-assessment meeting with the parent. If we are going to label a child ADD, we should be able to explain to a parent in understandable terms what this condition is all about. Educate the parent as much as you can.

   - explain the diagnostic process
   - explain the symptoms of ADD in terms of specific, observed behaviors
   - inquire about behavior (symptoms) at home
   - explain the differences between home and school in terms of at tentional demands and problems connected with hyperactivity and/ or impulsivity.
   - explain how this disorder is due to physical causes that the child can not control. Use examples of other parallel childhood disorders (e.g., diabetes or seizure

disorders).

- A one page facts sheet about ADD should be given to the parent for reference information (see FACTS ABOUT ADD in the Appendix)
- explain all the treatments available and/or appropriate for this child. Medication should be discussed as a form of treatment, even if it is not being recommended at this time.

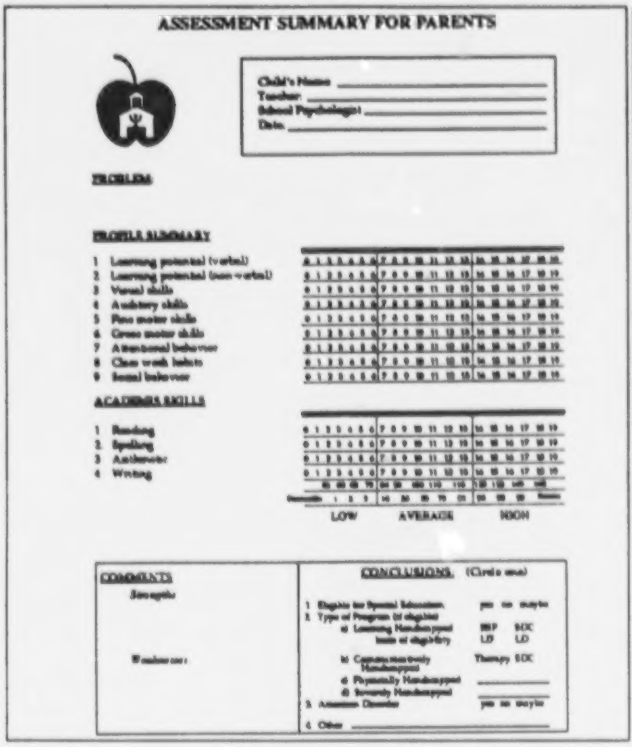
4. As school psychologists, we cannot directly prescribe medication nor can we make the decision to medicate. This is clearly the parents decision. Nevertheless, the school psychologist can have a very important influence on the decision to consider a "trial" on medication aimed at reducing problems associated with ADD symptoms.

   The school psychologist acts as a liaison or contact between the medical practicioner and the school. The document produced by the school psychologist, usually in the form of a psychoeducational report or a letter to the doctor (or both), should convey information about the child's problem symptoms and related behaviors that are evident at school, the severity of the problems and the possible remedies, including a possible medical intervention, now or in the future.

5. In the cases where the child has ADD with no hyperactivity or only mild hyperactivity (i.e., Types 2 and 3), it is particularly important that the school psychologist document that other appropriate treatments have been tried with less than satisfactory results.The psychologist must write an addendum to the original "psych" report and/or write a cover letter explaining the current status of the child along with the rational for the recommendation to try a medical intervention. It is also a good idea to indicate to the physician your perceptions regarding the parent's attitude about placing (or at least trying) the child on medication.

6. If the parents accept your recommendation to consult their family physician, pediatrician, or specialist like a child psychiatrist or a neurologist, it is imperative that you communicate with the doctor prior to their appointment. Give the parent your written recommendation (e.g., the three forms shown below). These documents for parents provide important information and instructions about the proposed treatment process for their child.

   Parents will demonstrate their commitment to accepting the treatment recommendation regarding medication by taking the initiative. Unless there are special circumstances, it is not advisable to make appointments for parents with doctors. The parents must take the initiative and make a commitment in order for this treatment to have a chance of being successful.



ASSESSMENT SUMMARY FOR PARENTS

Child's Name: ______________________
Teacher: ______________________
School Psychologist: ______________________
Date: ______________________

PROBLEM

PROFILE SUMMARY

1 Learning potential (verbal)
2 Learning potential (non-verbal)
3 Visual skills
4 Auditory skills
5 Fine motor skills
6 Gross motor skills
7 Attentional behavior
8 Class work habits
9 Social behavior

ACADEMIC SKILLS

1 Reading
2 Spelling
3 Arithmetic
4 Writing

LOW AVERAGE HIGH

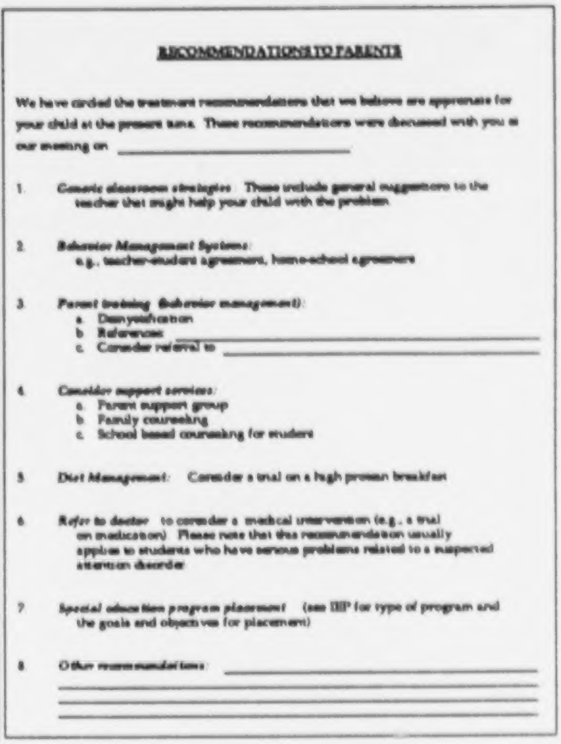
COMMENTS

Strengths

Weaknesses

CONCLUSIONS (Circle one)

1 Eligible for Special Education yes no maybe
2 Type of Program (if eligible)
  a) Learning Handicapped RSP SDC
  basis of eligibility LD LD
  b) Communicatively Handicapped Therapy SDC
  c) Physically Handicapped ______
  d) Severely Handicapped ______
3 Attention Disorder yes no maybe
4 Other ______________



RECOMMENDATIONS TO PARENTS

We have circled the treatment recommendations that we believe are appropriate for your child at the present time. These recommendations were discussed with you at our meeting on ______________________

1. *Generic classroom strategies:* These include general suggestions to the teacher that might help your child with the problem.

2. *Behavior Management Systems:*
   e.g., teacher-student agreement, home-school agreement

3. *Parent training (behavior management):*
   a. Demystification
   b. References ______________________
   c. Consider referral to ______________________

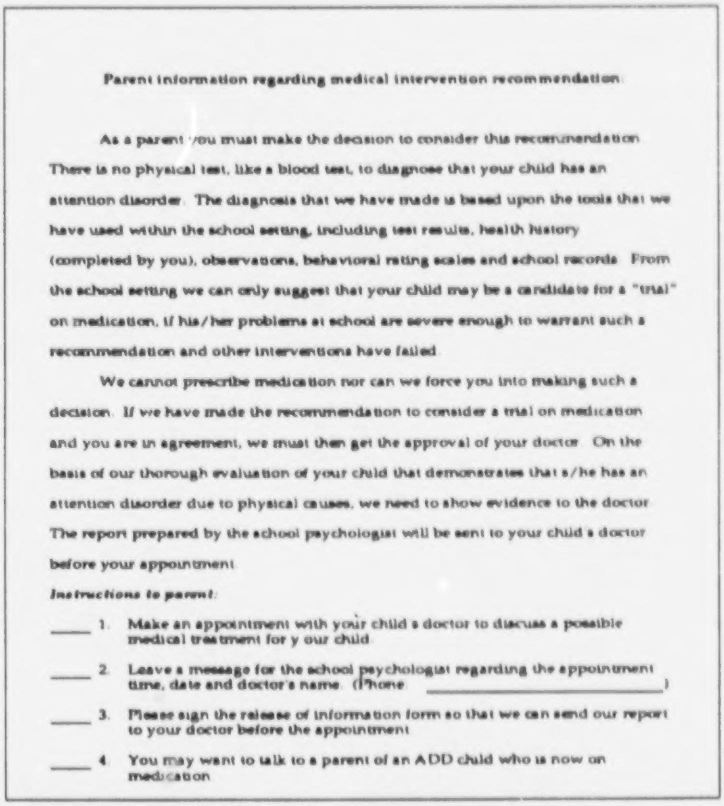
4. *Consider support services:*
   a. Parent support group
   b. Family counseling
   c. School based counseling for student

5. *Diet Management:* Consider a trial on a high protein breakfast

6. *Refer to doctor* to consider a medical intervention (e.g., a trial on medication). Please note that this recommendation usually applies to students who have serious problems related to a suspected attention disorder.

7. *Special education program placement* (see IEP for type of program and the goals and objectives for placement)

8. *Other recommendations:* ______________________



Parent information regarding medical intervention recommendation:

As a parent you must make the decision to consider this recommendation. There is no physical test, like a blood test, to diagnose that your child has an attention disorder. The diagnosis that we have made is based upon the tools that we have used within the school setting, including test results, health history (completed by you), observations, behavioral rating scales and school records. From the school setting we can only suggest that your child may be a candidate for a "trial" on medication, if his/her problems at school are severe enough to warrant such a recommendation and other interventions have failed.

We cannot prescribe medication nor can we force you into making such a decision. If we have made the recommendation to consider a trial on medication and you are in agreement, we must then get the approval of your doctor. On the basis of our thorough evaluation of your child that demonstrates that s/he has an attention disorder due to physical causes, we need to show evidence to the doctor. The report prepared by the school psychologist will be sent to your child's doctor before your appointment.

Instructions to parent:

_____ 1. Make an appointment with your child's doctor to discuss a possible medical treatment for your child.

_____ 2. Leave a message for the school psychologist regarding the appointment time, date and doctor's name. (Phone ______________________)

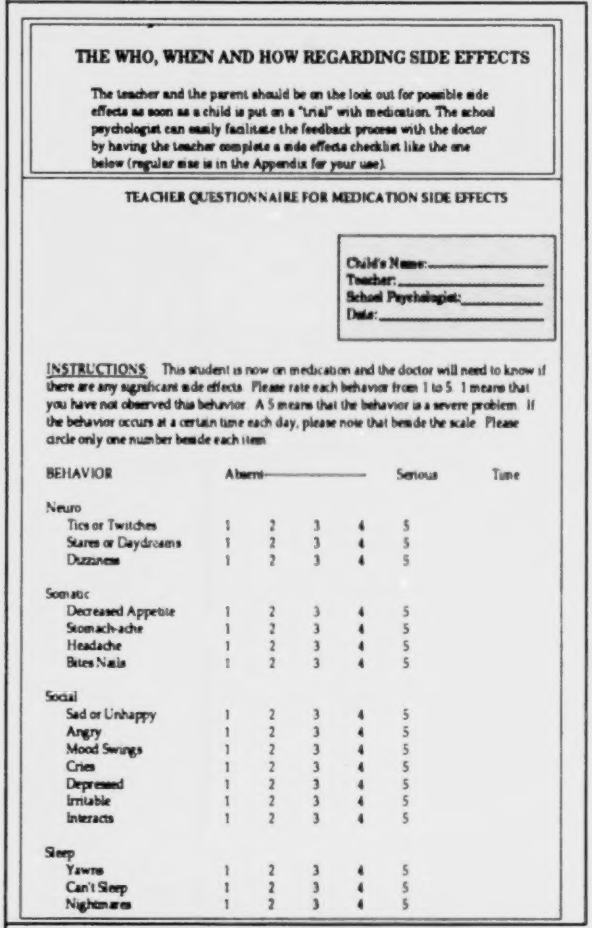
_____ 3. Please sign the release of information form so that we can send our report to your doctor before the appointment.

_____ 4. You may want to talk to a parent of an ADD child who is now on medication.

7. Follow-up. Medication is usually the beginning of treatment for the child - not the end. It is absolutely critical that in order to see if a "trial" on medication really works, we have a method to monitor the effects of the medication at school. The school psychologist should take the lead in the follow-up process.

Once the child seems to be on the correct dose of medication (i.e., after about two weeks of significant symptom reduction without being "zombie" like), we should again readminister the behavior rating scale that was used in diagnosis (i.e., CTRS, ACTeRS, SNAP checklist, etc.). Hopefully, the teacher's response to the readministration of the behavioral scale will provide an accurate assessment of the treatment effect with medication. It is also important at this time to have the teacher respond to a side effects checklist like the one shown below.

After collecting the above data from the teacher, the school psychologist should document the results in a letter form and send the letter to the physician. An open-ended form letter like the one shown below will expedite this procedure.



THE WHO, WHEN AND HOW REGARDING SIDE EFFECTS

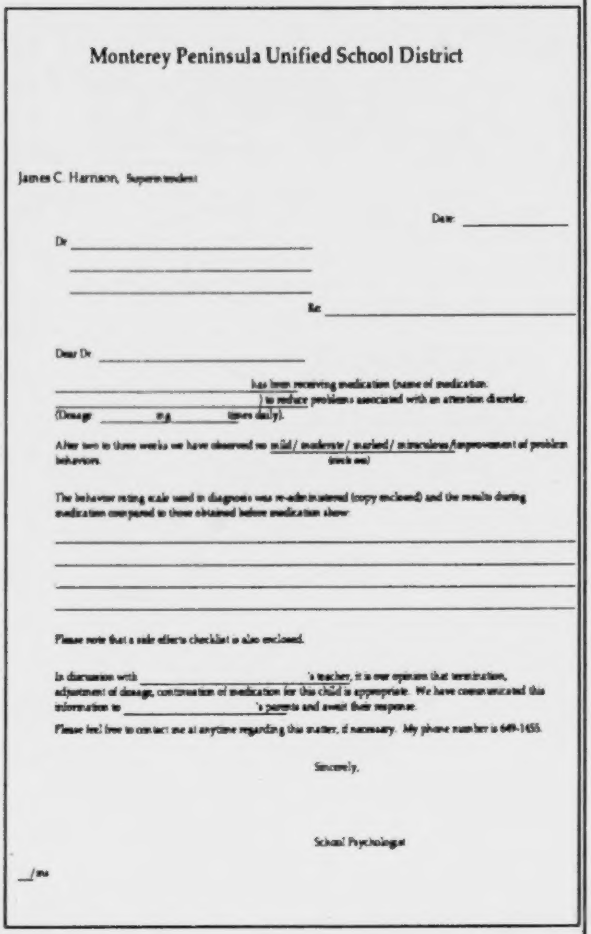
The teacher and the parent should be on the look out for possible side effects as soon as a child is put on a "trial" with medication. The school psychologist can easily facilitate the feedback process with the doctor by having the teacher complete a side effects checklist like the one below (regular size is in the Appendix for your use).

TEACHER QUESTIONNAIRE FOR MEDICATION SIDE EFFECTS

Child's Name: ____________
Teacher: ____________
School Psychologist: ____________
Date: ____________

INSTRUCTIONS This student is now on medication and the doctor will need to know if there are any significant side effects. Please rate each behavior from 1 to 5. 1 means that you have not observed this behavior. A 5 means that the behavior is a severe problem. If the behavior occurs at a certain time each day, please note that beside the scale. Please circle only one number beside each item.

BEHAVIOR	Absent				Serious	Time
Neuro						
Tics or Twitches	1	2	3	4	5	
Stares or Daydreams	1	2	3	4	5	
Dizziness	1	2	3	4	5	
Somatic						
Decreased Appetite	1	2	3	4	5	
Stomach-ache	1	2	3	4	5	
Headache	1	2	3	4	5	
Bites Nails	1	2	3	4	5	
Social						
Sad or Unhappy	1	2	3	4	5	
Angry	1	2	3	4	5	
Mood Swings	1	2	3	4	5	
Cries	1	2	3	4	5	
Depressed	1	2	3	4	5	
Irritable	1	2	3	4	5	
Interacts	1	2	3	4	5	
Sleep						
Yawns	1	2	3	4	5	
Can't Sleep	1	2	3	4	5	
Nightmares	1	2	3	4	5	



Monterey Peninsula Unified School District

James C. Harrison, Superintendent

Date: ____________

Dr. ____________
____
____

Re: ____________

Dear Dr. ____________

____________ has been receiving medication (name of medication ____________) to reduce problems associated with an attention disorder. (Dosage ______ mg ______ times daily).

After two to three weeks we have observed no mild/ moderate/ marked/ miraculous/improvement of problem behaviors. (circle one)

The behavior rating scale used in diagnosis was re-administered (copy enclosed) and the results during medication compared to those obtained before medication show:

____
____
____
____

Please note that a side effects checklist is also enclosed.

In discussion with ____________'s teacher, it is our opinion that termination, adjustment of dosage, continuation of medication for this child is appropriate. We have communicated this information to ____________'s parents and await their response.

Please feel free to contact me at anytime regarding this matter, if necessary. My phone number is 649-1455.

Sincerely,

School Psychologist

__/ms

Medication: the bottom line

True ADD has biophysical causes and does not always respond as well as expected to environmental intervention (e.g., educational programming, counseling, parent training, behavior management, etc.). It has been clearly demonstrated over the past 50 years that stimulant medication as a biophysical treatment for this bio-physical condition (true ADD) is probably the single most effective treatment for reducting problem symptoms associated with ADD.

The positive effects of stimulants have been reported in learning tasks in the laboratory (Cantwell and Carlson, 1978; Conners and Rothschild, 1968; Pelham, 1986; Swanson and Kinsbourne, 1979) as well as in children's classroom performance (Barkley and Cunningham, 1979; Pelham, 1987). There are numerous summaries of research reviews specifically devoted to the effects of medication on ADD children; these reviews are mentioned at the beginning of this section on medication as a treatment.

In order to procure medication as a treatment for an ADD child (perhaps after other interventions have had limited success) the school psychologist must first convince the parent (or guardian) that a medical intervention is appropriate. If you cannot convince the parent to consider the intervention, you can go no further at this point. On the other hand, if the parent agrees, you must now convince the medical expert to entertain the notion of a "trial run" on medication, and, surprisingly, this is usually not difficult.

The school psychologist must convince the medical expert that a thorough assessment of the child has been conducted (e.g., the Monterey Model). It is also good practice to document evidence with all of the diagnostic information including the results of attempted interventions or treatment. In order for the school psychologist to have access to medical treatment, s/he must establish credibility with the medical practicioner by completing a thorough diagnostic assessment and documenting all of the known information in a psychoeducational report. As a school psychologist thinking about medication as a possible treatment, you must first convince yourself that this is a true ADD and not the psuedo kind.

SPECIAL EDUCATION

TREATMENT WITH SPECIAL EDUCATION

SCHOOL ZONE
STAY ON TASK

We know there is a definite connection between ADD and LD, and special education programs can be extremely powerful as a form of treatment for the ADD child with a learning disorder. The school psychologist plays a major role in the process of identification and placement of the ADDstudent with special education needs. Special education placement provides a unique treatment program for the qualified ADD student by (1) providing individualized remediation of the academic skill deficits; (2) focusing on improvement of work habit problems; (3) evaluating the student's rate of learning; (4) directly evaluating the severity of the ADD and LD problems in an optimal teaching situation; and, (5) evaluating the effectiveness of various treatments and multi-modal treatment programs within the school setting, (e.g., behavior management, medication, special education, etc.) which can all be part of the student's IEP.

Treatment with Special Education for the ADD student

Most school psychologists are directly involved with special education programs in terms of program information, assessment process, eligibility determination, program placement and review. The school psychologist is a very important member of the IEP team as well as the multi-disciplinary assessment team. (If you don't know what an IEP is, you're not a school psychologist and you shouldn't be reading this book). Special education programs for learning disabilities (LD) is by far the most common special education program placement consideration for problem students.

In California, the category known as Learning Handicapped (LH) is comprised mostly of LD qualified students. A typical school psychologist in California, who operates as part of the multi-disciplinary assessment team, will spend at least 80% of his or her time in assessment/diagnosis, placement, documentation, reevaluation and review of Learning Handicapped students.

Learning Handicapped Programs:

The population of students known as LH (learning handicapped) are qualified for special education services on the basis of a learning disability if they meet criteria for eligibility because of a "severe discrepancy." Most school psychologists are very familiar with the discrepancy model, although the global category of LH designation can also apply to students with low intellectual functioning (i.e., mildly retarded or educable mentally retarded categories), who qualify for special education programs on the basis of different eligibility requirements. Special education programs in California are not too different than those programs in other parts of the United States, although California does not have special programs for "behaviorally disturbed" students which could otherwise serve the ADD students who would not be qualified as an LD student in California. In other words, the ADD student in California cannot be technically qualified for special education services unless they also have a recognizable learning disability.

In California, ADD students who are eligible under the LH designation could receive special education services from the Resource Specialist Program (RSP) or the Learning Handicapped/Special Day Class (LH/SDC). These programs are described as follows:

The Resource Specialist Program (RSP):

The RSP is for learning disabled students who are mainstreamed into regular classrooms for the majority of the school day. These programs serve students from elementary through high school. Students typically come to RSP for instruction in basic academic skills such as reading, math, written language and/or study skills. The RSP teacher is specially credentialed to teach students with learning disabilities.

Learning Handicapped/Special Day Class (LH/SDC):

The LH/SDC programs are for eligible students whose learning handicaps preclude their being assigned to regular class for the majority of the school day. These programs also serve students from elementary through high school. While these students are in SDC for the majority of the school day, they may be mainstreamed into the regular education program for one or more periods per day.

The LH/SDC also has a special education credential for teaching learning handicapped students. Special education classes often design their programs with a strong component of behavior management which is especially appropriate for students with symptoms of ADD.

Eligibility for the LH programs described above is usually determined by the results of assessment which demonstrates that (1) the student has a learning disability defined by test results that show a discrepancy between ability and achievement; and that (2) the discrepancy appears to be caused by specific processing deficits such as memory problems, perceptual problems, sensory-motor delays, etc. Attention problems can be considered a processing disorder by California Education regulations.

California Education Code, Title 5,CAC, Section 3030 (J): specifically stated in the California Education-Code the assessment team must demonstrate and document that a "severe discrepancy" exists due to or directly related to a "basic psychological processing disorder" in one or more of the following five areas:

(a) Attention
(b) Visual processing
(c) Auditory processing
(d) Sensory-motor skills
(e) Cognitive abilities, including association, conceptualization and expression.

Under this regulation or law, then, an attention disorder or ADD is considered a processing disorder which could be the cause of a learning disability.

It is interesting to note that the term learning disability, as it is currently used, can be traced to the first edition of Sam Kirk's introductory textbook in special education, Educating Exceptional Children (Kirk, 1962). Kirk's definition of LD:

> A learning disability refers to a retardation, disorder,or delayed development in one or more of the processes of speech, language, reading spelling, writing, or arithmetic resulting from a possible cerebral dysfunction and/or emotional or behavioral disturbance and not from mental retardation, sensory deprivation, or cultural or instructional

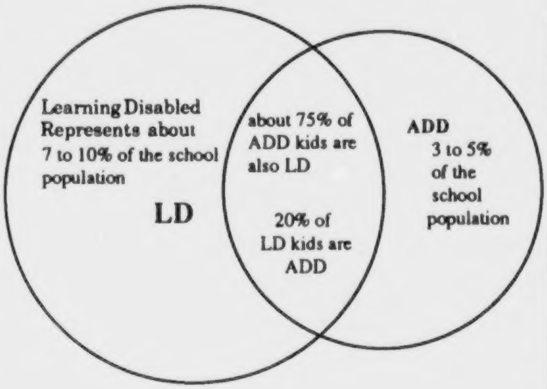
> factors .... These disabilities refer to a discrepancy between the child's learning capacity (as indicated by aptitude tests and his achievement, without reference to the cause of the discrepancy between capacity and achievement. (p.263)

The two essential characteristics of this definition of LD has remained the same for almost three decades. They are (1) the discrepancy between ability and achievement, and (2) specification of appropriate (e.g., neurological dysfunction) as well as inappropriate causal mechanisms. The neurological dysfunction that causes a learning disability is now termed a processing disorder which we infer from behavioral evidence. The educator is interested primarily in the behavior deficit rather than in the location or extent of the cerebral dysfunction.

What is the connection between ADD and LD?

In practice we do see children who have a learning disability as well as an attention disorder. The research that looks at the connection between ADD and LD is fuzzy and difficult to interpret. Remember, ADD is not the same syndrome that we used to refer to as hyperactivity and many writers and researchers who investigate ADD talk about treatment effects obtained from samples of "hyperactive" children. ADD is a more inclusive syndrome than hyperactivity and probably less connected to true learning disabilities than children who were labeled hyperactive.

Silver (1988) estimates that the ADD/LD connection is very significant in that 75 to 85% of ADD students would also be learning disabled; this connection is graphically illustrated below.


Learning Disabled Represents about 7 to 10% of the school population
LD
about 75% of ADD kids are also LD
20% of LD kids are ADD
ADD
3 to 5% of the school population

Other authors on ADD (Friedman and Doyal, 1987) suggest that there is very little real overlap between these two disorders. Friedman and Doyal state that most children who are labeled LD are actually ADD students who are misdiagnosed. That is, these students because of academic underachievement, disorganization, poor quality of written work and poor productivity are labeled LD and placed in special education. The danger of only diagnosing a student as LD when ADD may be the real problem (or at least a causal problem) is that other timely and effective treatments may never have been considered.

The point to make here is that

school psychologists should know as much about ADD as they do about LD and that in the process of every assessment we need to confirm or rule out the existence of these two disorders. LD and ADD can be mutually exclusive but they usually are not. After all, these conditions have suspected common origins, i.e., mild neurodevelopmental (brain) dysfunction. Remember, never use the term "brain damaged" around other humans, especially parents. (See Maxim # 6 , Chapter 5).

Points of emphasis regarding the LD/ADD Connection:

1. An attention disorder (ADD can be the sole cause of a learning disorder. ADD is a basic psychological processing disorder (California) which can account for a learning disability.

2. ADD by itself is not a learning disability; therefore, in most cases a significant academic skill deficit must be present in order for a student to be eligible for special education services. That is, if special education eligibility is determined by the discrepancy model.

3. If an ADD child is eligible for special education as a learning disabled student, then this form of treatment should be "tried" before medication, if possible, to determine its treatment effectiveness in
   a. remediation of the academic deficiency, and
   b. remediation of ADD related work habit problems (e.g., task acceptance, start task, stay ON TASK and task completion).

If the ADD is not too severe, medication may not be needed when other treatment forms like special education prove to be effective.

4. The special education teacher who is usually part of the assessment team can continue to provide the school psychologist with diagnostic information regarding the severity of the ADD problem as it relates to the learning disability, work habits and social behavior. This is part of the process of longitudinal diagnosis whereby other treatments for ADD can be recommended as needed through normal special education procedure including IEP Review meetings, tri-annual reassessment and parent conference meetings.

5. One expert on ADD (Silver, 1988) estimates that about 80% of all ADD children are learning disabled and that about 20% of LD students have ADD. Perhaps we don't really know for sure, but it's probably safe to say that a majority of ADD children have related learning disabilities; we do know that ADD and LD are caused by physiological dysfunction of the brain.

6. ADD children can have other processing disorders like perceptual dysfunctions involving visual, au-

ditory and sensory-motor deficits. Also, since such a high number of ADD cases do have learning disabilities, a learning disability should be considered. At least a secondary symptom or a related disorder which can lend additional evidence to confirm a diagnosis of ADD.

7. Estimates of ADD in the general population runs at the 3 to 5% level while the LD population is estimated at about 10% although these populations overlap one another.

8. Silver estimates that 80% of ADD children have a learning disability; therefore, at least 20% of ADD children do not have a significant learning disability and are not eligible for special education, unless your IEP team decides otherwise.

9. Here's another point to make regarding whether or not to recommend medication. Sometimes we have no other options than to recommend one or the other or both, i.e., special education and/or medication. If we are dealing with a fairly involved ADD child (e.g., Type 1 or a severe Type 2), we may have to recommend both treatments at the same time. On the other hand, when a child demonstrates significant ADD symptoms and only mild learning problems that make it difficult to be considered eligible for special education, we should strongly consider the use of medication as a preventative treatment. We don't want to label a child learning disabled if s/he isn't and we don't want a child to become learning disabled, if we can prevent it. An ADD child at the beginning of formal learning (usually about age 6) may not meet eligibility for special education but, as time goes by, the learning problems and behavior problems usually get more severe. I have been involved in many such cases, where the child responded well to medication and special education was never needed.

*I*n summary, we know there is a definite connection between ADD and LD and special education programs can be extremely powerful as a form of treatment for the ADD child with a learning disorder. The school psychologist plays a major role in the process of identification and placement of the ADD student with special education needs. Special education placement provides a unique treatment program for the qualified ADD student by:

(1) providing individualized remediation of the academic skill deficits;
(2) focusing on improvement of work habit problems;
(3) evaluating the student's rate of learning;
(4) directly evaluating the severity of the ADD and LD problems in an optimal teaching situation; and,
(5) evaluating the effectiveness of various treatments and multi-modal treatment programs within the school setting, e.g., behavior management, medication, special education, etc.

Treatment of ADD: Concluding Remarks

As mentioned earlier and throughout this text, the most promising way of treating the ADD child is to combine the medical intervention, usually involving stimulant medication, with a variety of other appropriate interventions for the individual child. A recommendation to use medication with other treatment is especially appropriate for the Type 1 and Type 2 forms of ADD; the research on multimodal treatment intervention support this contention. For example, a study by Gittelman, et al (1980) concluded that ADD children (mainly Types 1 and 2) who received Ritalin and behavior management at home and school were equal to control (normal) children on all measures in the study. Close behind in improvement were children who received only Ritalin, trailed by the group treated with behavior management techniques and a placebo medication. Another comparative study found similar added effects of stimulants, contingency management, and tutoring (Pelham, et al, 1980). A comprehensive three year study by Satterfield, Satterfield and Cantwell (1981) found that multimodal treatment consisting of stimulant medication combined with one or more other forms of treatment tailored for the child (i.e., individual therapy, group therapy, special tutoring, parent training and family therapy) resulted in higher treatment outcomes than obtained with medication alone.

Two other studies mentioned earlier in the section on cognitive coaching (Brown, et al, 1985, and Abikoff and Gittleman, 1985) compared cognitive therapy with Ritalin therapy and the two treatments combined. In both studies the cognitive intervention did not significantly improve the results over medication alone.

The question of what can we do to help the ADD student must be answered by the individual school psychologist. I think that the school psychologist can do more to help the ADD student than any other professional. The most accurate method of diagnosis is one conducted within the setting where the problems are most prominent (usually in the school). The Monterey Method of ADD diagnosis , as outlined in Chapter 2, is an accurate and efficient system that fits into the role of most school psychologists. If we are certain of our diagnosis, then we can be instrumental in providing appropriate treatment and we have seven treatment options or combinations thereof to consider as shown in Figure 14.

DIAGNOSIS	TREATMENT
YES! (affirmative diagnosis of ADD)	1) medication (especially Types 1 and 2) combined with ⬇ 2) Behavior Management combined with ⬇ 3) Brief counseling (dymystification and/or general classroom strategies) 4) Special education, if neded and eligible (tutoring component) special education teacher can carry on counseling a) demystification b)CBT (if needed) c)social skills training 5. Training by School Psychologist to Special Education teacher (part of IEP services) 6. Diet Management and/or recommendations to parents 7. Parent training
NO! (Negative diagnosis of ADD, ie.e., pseudo type)	Treat it appropriately – example: behavior strategies – refer to therapist (if possible) for Type 4 ADD
MAYBE? (uncertain of ADD)	– Talk about treatments for ADD – Consider non-drug and non-special education initially, if practical – Special education (if eligible) with behavior management component – Continue "longitudinal diagnosis"

Figure 14. Treatment combinations

As with diagnosis, the most effective treatments are ones that are implemented within the setting where the problems are most prominent (usually in the school). For example, counseling delievered from an outside clinic rarely effects a change of behavior at school; the outside counselor rarely has any control over the reinforcers that affect student behavior at school. Treatment from within the school setting is more effective.

What treatments for the ADD child can a school psychologist really deliver? All seven forms of treatment discussed in this text could be considered. What you can do depends upon the specific role or roles that you play within your school setting. And, of course, the effectiveness of any of the treatment forms depends upon the competency and cooperation of those who actually carry out the treatment. Unless you can do some of the direct counseling to the ADD student, or perhaps parent training in behavior management, your role is mainly that of a consultant to others: parent, teacher, pediatrician, special education teacher, psychologist (i.e., therapist/counselor).

TREATMENT	TREATER
1. Generic Classroom Strategies	Classroom teacher and/or Special education teacher
2. Behavior Management Programs	Teacher and/or parent
3. Diet Management	Parent and child
4. Counseling	• agency or private counselor • school counselor • school psychologist sometimes • teachers
5. Special Education	special education teacher and regular education teacher
6. Parent Training	• agency or private counselor • school psychologist can do this sometimes
7. Medication stimulants anti-depressants	Medical doctor with ompliance of parent and child (school psychologist is instrumental in process)

As you can see from the simple chart above, the school psychologist often has very little to do with direct treatment of the ADD student. However, what is important is that no one but the school psychologist, if knowledgeable, has such a UNIQUE role in both the diagnosis and treatment of Attention Deficit Disorder. We work in the setting where the problems are and where the most effective treatments can be implemented.

MAXIMS for the School Psychologist

Introduction:

There are some practical rules or, as they are called here, "maxims" that attempt to summarize some of the more salient points previously discussed. A maxim is an aphorism or an absolute truth having to do with specific conduct or behavior. I have an old book on my shelf that belonged to my father entitled *Maxims and Instructions for the Boiler Room*, which is a guide for pipe fitters when they are operating in a boiler room. It is a good idea to keep some common sense rules in mind while working in a boiler room because careless mistakes can blow up in your face.

1. MAXIM *Never make a diagnosis of ADD without completing a thorough assessment of the child.* The assessment should include an individual psychometric assessment of the child. The mistakes you make in diagnosis of ADD results in diminished credibility, especially when dealing with a physician when medication is considered as a treatment. The physician will rely on the information you provide and will trust your diagnosis if you have been thorough and have accurately documented the evidence.

If the medical expert is going to "prescribe" treatment for an educational problem, you have to prove to that expert that you , as a school psychologist, know what you're talking about and that you have done *your* homework. You establish credibility with the medical experts by showing that you are an expert yourself with an educational-medical disorder like ADD. You demonstrate your expertise by completing a thorough assessment and by documenting the evidence/findings in your psychoeducational report (see example report in Appendix).

2. MAXIM *Don't proclaim to be an expert on ADD even if you think you are.* It's okay to let others (parents, teachers, pediatricians, etc.) perceive you as an expert, but never tell them that you are. Personally, I think it's best to say: "Yes, I have some information about attention disorders, but I'm not an expert. " There are various forms of treatment that we can talk about. Be humble, even deny your expertise.

3. MAXIM *Never use a rating scale* (like those discussed in Chapter 2) *as a* *primary "test" for ADD.* No single piece of information about a child can lead to a diagnosis. Remember, there is no conclusive test for ADD, but multi-source assessment like the process described as the Monterey Model (Chapter 2) will provide us with enough information in a cost-effective manner to make an accurate diagnosis.

4. MAXIM *Don't push drugs!* As a rule of thumb, never mention the word "drug" to parent(s), but rather "medication." This Rule should read: Never over-simplify the recommendation for treatment by implying or saying that the child should be placed on medication and that he or she will be cured. The ADD or Hyperactivity label often carries with it the associated treatment of "drugs"; remember, don't use that word. There are other treatments besides or in addition to medication that should be considered. Parents are often misinformed about the use of medication for ADD. Demystification and providing parents with accurate information is essential so that well informed decisions can be made. When parents cannot be convinced to even "try" medication inspite of your attempts to enlighten (i.e., demystify) them about the condition, you must accept their refusal. We cannot force parents to seek a medical treatment that they do not want.

5. MAXIM *Don't over simplify treatment of ADD by recommending only medical treatment.* ADD is a school problem, behavior problem and often social problem that requires multiple forms of treatment within the school setting and home setting. For example, parent training is often recommended for the Type 1 student. The aggressivity of the Type 1 student is learned behavior that is the result of coercive and aggressive parent-child interaction. Also, behavior management strategies, which form the main ingredient in parent training, are effective in the retraining process of the ADD student, especially if effective response to medication is observed. Medication doesn't teach the child anything but it makes them "available" to learn so that other forms of treatment are effective.

6. MAXIM *Never say "brain damage" or use this term in reference to ADD, LD or even seizure disorders with parents.* The terms "brain damage" and "brain dysfunction" are loaded terms (like "retardation") which cause parents to respond emotionally and irrationally, which can lead to denial and non-compliance in the treatment process. Consider some of the following euphemisms in discussing ADD:

- physical basis or cause
- physiological problem
- bio-chemical
- processing problem in the brain like a leaning disability
- neurodevelopmental problem

Always reassure the parent that their ADD child has at least average abilities and that "their kid does not have a hole in his or her head."

7. MAXIM *Always discuss the treatment options with the parents and teacher.* Appropriate treatment options will vary depending upon the condition of the child, the parent(s) and the teacher. If you are fairly certain of your diagnosis of positive ADD, you must discuss medication even if it's not being recommended at present. USE THE ASSESSMENT SUMMARY FOR PARENT with RECOMMENDATIONS TO PARENTS. There are many misconceptions about leaning disabilities, ADD and special education. The school psychologist should be knowledgeable so that parents, teacher and administrator are getting accurate information from us.

8. MAXIM *Follow up in the treatment process regardless of the treatment.* Find out what is working and what is not. When medication is being tried it is imperative that the school psychologist closely monitor the effects and initiate communication with the physician. When a special education program becomes part of the treatment for the child, we often have a built in follow up procedure; however, if non-special education treatments are implemented (e.g., behavior management, medication, diet management, etc.) it is the job of the school psychologist to initiate and maintain follow up.

9. MAXIM *Make your diagnostic decision clear even if you say "maybe."* Remember, you have three diagnostic choices regarding ADD:

Yes (has it)

No (doesn't have it)

Maybe (not sure)

When the diagnosis is "maybe", you should start a longitudinal diagnosis by testing the effects of appropriate non-drug treatment within the school setting.

10. MAXIM There are no absolute statements about when to recommend that a particular child should be "considered for a trial on medication." No matter how certain you are of your diagnosis, the diagnosis of ADD is always "subjective" because we have no absolute test for it. Here are some general guidelines for you to consider regarding the four types of ADD:

➡ The Type 1 child should be considered a strong candidate for medication early in the treatment process. The research evidence gathered over the past twenty years demonstrates rather conclusively that the effectiveness of all other treatments for ADD (Type 1) depend upon the treatment with medication. For example, counseling, behavior management, parent training and special education (academic learning) are maximally effective if the child is concurrently successfully treated with stimulant medication.

➡ The Type 2 child often needs medication to achieve maximum benefit from other treatment options and it is unfortunate, but true, that in some situations medication may be our only treatment option. Often with Type 2, the consideration for medication depends upon the attitude of the parent about the problem and the use of medication to help correct it. This is the situation where the school psychologist must clear up misconceptions and demystify ADD to the parent. Always talk about medication as a treatment "to be considered" on a "trial basis."

The Type 2 child is often difficult to diagnose because of only "mild" hyperactivity. Inattention and impulsivity are not observed in the doctors office and the pediatrician has no suspicion about ADD unless a school psychologist has alerted the doctor to it.

➡ The Type 3 child truly has a hidden handicap and unless they are lucky enough to have a learning disability they may never be considered for psychoeducational evaluation. For the Type 3 child, it is natural to have informally tried many of the other treatment approaches before the child is even considered as having ADD. The Type 3 child is somewhat of an enigma with very little information in the literature about this condition.

Medication for Type 3 should be considered as a treatment after all other forms of treatments have been tried to the extent possible with results that don't justify the effort. For example, the children who cannot seem to get their work done; who do poorly in school; who suffer from self-esteem problems because in spite of all the effort by themselves and others, they continue to be underachievers and are the ones that should be considered for a "trial" on medication.

➡ The Type 4 child may be a candidate for medication, but not necessarily stimulant medication. For these children there is a primary emotional cause for their ADD symptoms (although depression and anxiety can also have some biochemical origins). Many of the treatments that are appropriate for the true ADD child are also appropriate for the pseudo ADD, including additional forms of counseling and therapy, if available.

Maxims or beliefs?

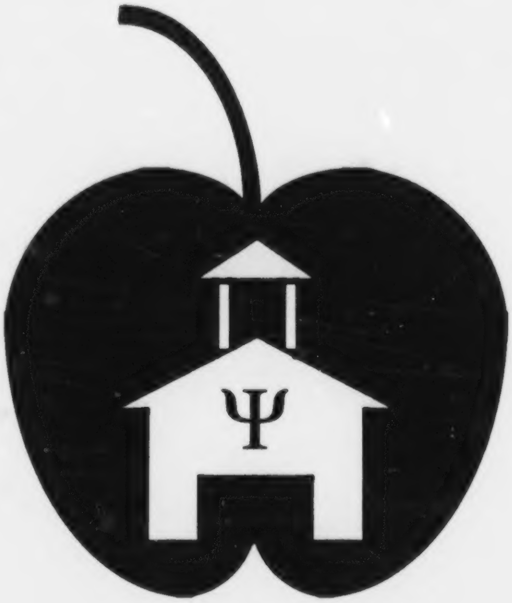
It has been said (but I'm not sure who said it) that the only absolute truth is that there are no absolute truths. Perhaps using the term "maxim" is overstating these points; nevertheless, the maxims stated here represent practical suggestions that are relevant to school psychology and specifically the ADD student.

It should be kept in mind that any or all of the information in this text is based upon my own beliefs and/or information that supports those beliefs. Finally, in summation, here are simple statements about those beliefs related to ADD and school psychology:

- ADD can exist in children with only mild and sometimes no signs of hyperactivity as well as in children with hyperactivity.
- An attention disorder represents a significant problem for the child in the school setting and affects learning, work habits and/or social behavior.
- True ADD is caused by mild brain dysfunction as in a true learning disability; ADD is thought to be a biochemical disorder.
- ADD is and has been over, under, and mis-diagnosed. Controversy over ADD is related to treatment with medication and concerns with misdiagnosis.

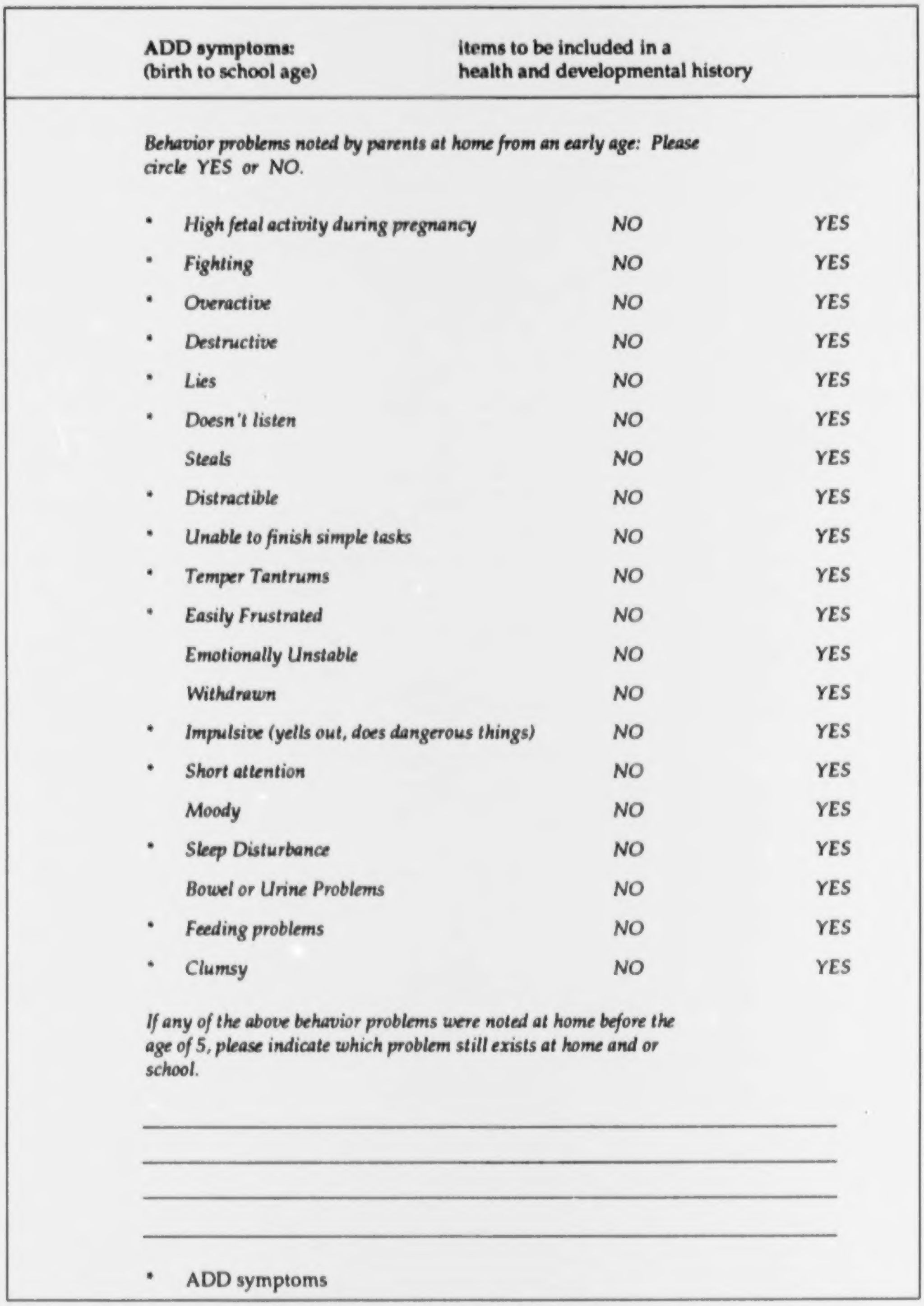
- The role of the school psychologist lends itself uniquely to the most accurate diagnosis of ADD. The school psychologist is a diagnostician in the setting where the problem symptoms cause the child to appear the most dysfunctional.
- The process of ADD diagnosis is the same as for LD diagnosis and these conditions are causally related.
- The psychoeducational report is a powerful document in the process of the procurement of a medical intervention.

- The school psychologist has a unique role in the treatment process of the ADD child. You not only diagnose but you recommend and coordinate treatment for the student.
- The school psychologist has the most direct access to critical diagnostic in formation about the potential ADD child that no one else has access to.



APPENDIX

Item	
1	ADD items for the health history
2	Classroom observation form
3	The WISC-R Attention/Ability Profile
4	Teacher Questionnaire
5	Parent Questionnaire
6	Teacher Questionnaire Profile for Boys
7	Parent Questionnaire Profile for Boys
8	Teacher Questionnaire Profile for Girls
9	Parent Questionnaire Profile for Girls
10	The Monterey Questionnaire
11	Teacher-Student Agreement
12	The Psychoeducational Report Example
13	The Two Week High Protein Breakfast Trial
14	CHADD Chapter Formation Manual (abridged)
15	Parent Suport Groups and Associations
16	Bed Time Agreement
17	Daily Report Cards
18	The Weekly Report
19	ON-TASK Cards
20	Facts About ADD
21	Assessment Summary for Parents
22	Recommendations to Parents
23	Parent Information Regarding Medical Recommendation
24	Permit to Take Medication in School
25	Teacher Questionnaire for Medication Side Effects
26	Open-ended Form Follow-up Letter to Physician
27	Sample Follow-up Letter to Physician regarding medication effects
28	Order Form for this text



ADD symptoms:
(birth to school age)

items to be included in a
health and developmental history

Behavior problems noted by parents at home from an early age: Please circle YES or NO.

•	*High fetal activity during pregnancy*	NO	YES
•	*Fighting*	NO	YES
•	*Overactive*	NO	YES
•	*Destructive*	NO	YES
•	*Lies*	NO	YES
•	*Doesn't listen*	NO	YES
	Steals	NO	YES
•	*Distractible*	NO	YES
•	*Unable to finish simple tasks*	NO	YES
•	*Temper Tantrums*	NO	YES
•	*Easily Frustrated*	NO	YES
	Emotionally Unstable	NO	YES
	Withdrawn	NO	YES
•	*Impulsive (yells out, does dangerous things)*	NO	YES
•	*Short attention*	NO	YES
	Moody	NO	YES
•	*Sleep Disturbance*	NO	YES
	Bowel or Urine Problems	NO	YES
•	*Feeding problems*	NO	YES
•	*Clumsy*	NO	YES

If any of the above behavior problems were noted at home before the age of 5, please indicate which problem still exists at home and or school.

____

____

____

____

• ADD symptoms

Example form added to a health history

MONTEREY PENINSULA UNIFIED SCHOOL DISTRICT
DEPARTMENT OF SPECIAL EDUCATION
700 PACIFIC STREET
MONTEREY, CALIFORNIA 93940

Observation should be at least 20 minutes in length and can be of classroom or playground activities.

OBSERVATION REPORT

Student Observed____________________ Date____________ Time____________

School____________________ Grade__________ Teacher________________

Circumstances of Observation______________________________

____

____

Brief description of subject's behavior while being observed:

Recommendations:

Recommended Assessments:

____

____

____

☐ no assessment needed

Observer Signature__________________ Date__________

Print Name:______________________________

Title:______________________________

Phone:______________________________

The WISC-R Attention/Ability
PROFILE

ABILITY																				
1. Verbal Ability	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
2. Spatial Ability	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
ATTENTION																				
1. Level of Attention	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
2. Audio Attention (listening)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
3. Visual Attention	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
4. Freedom from Distractability	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
WISC-R Full Scale		52		60		68	75	84	90		100	110		116	125	132		140	148	
percentile				<1%		2%	5%	18%	25%		50%	75%		84%	95%	98%		99%+		

Derived Scaled Scores:

Ability Measures:

1. Verbal Conceptual Ability SIM + VOC ÷ 2 = _____
2. Spatial Ability PC + BD + OA ÷ 3 = _____

Attention Measures:

1. Level of Attention DS + COD ÷ 2 = _____
2. Audio Attention (listening) ARI + DS ÷ 2 = _____
3. Visual Attention PC + COD ÷ 2 = _____
4. Freedom from Distractability ARI + DS + COD ÷ 3 = _____

Use the scaled scores from the test results to obtain a derived scaled score which can be interpreted like an individual scaled score (M = 10; SD = 3). A spread of 3 points or more between derived scaled scores on the profile is considered significant.

Teacher's Questionnaire

Name of Child ______________________ Grade ________

Date of Evaluation ______________________

Please answer all questions. Beside *each* item, indicate the degree of the problem by a check mark (✓)

	Not at all	Just a little	Pretty much	Very much
1. Restless in the "squirmy" sense.				
2. Makes inappropriate noises when he shouldn't.				
3. Demands must be met immediately.				
4. Acts "smart" (impudent or sassy).				
5. Temper outbursts and unpredictable behavior.				
6. Overly sensitive to criticism.				
7. Distractibility or attention span a problem.				

8. Disturbs other children.				
9. Daydreams.				
10. Pouts and sulks.				
11. Mood changes quickly and drastically.				
12. Quarrelsome.				
13. Submissive attitude toward authority.				
14. Restless, always "up and on the go."				

15. Excitable, impulsive.				
16. Excessive demands for teacher's attention.				
17. Appears to be unaccepted by group.				
18. Appears to be easily led by other children.				
19. No sense of fair play.				
20. Appears to lack leadership.				
21. Fails to finish things that he starts.				

22. Childish and immature.				
23. Denies mistakes or blames others.				
24. Does not get along well with other children.				
25. Uncooperative with classmates.				
26. Easily frustrated in efforts.				
27. Uncooperative with teacher.				
28. Difficulty in learning.				

Parent's Questionnaire

Name of Child ______________________ Date ________

Please answer all questions. Beside *each* item below, indicate the degree of the problem by a check mark (✓)

	Not at all	Just a little	Pretty much	Very much
1. Picks at things (nails, fingers, hair, clothing).				
2. Sassy to grown-ups.				
3. Problems with making or keeping friends.				
4. Excitable, impulsive.				
5. Wants to run things.				
6. Sucks or chews (thumb; clothing; blankets).				
7. Cries easily or often.				
8. Carries a chip on his shoulder.				
9. Daydreams.				
10. Difficulty in learning.				
11. Restless in the "squirmy" sense.				
12. Fearful (of new situations; new people or places; going to school).				
13. Restless, always up and on the go.				
14. Destructive.				
15. Tells lies or stories that aren't true.				
16. Shy.				
17. Gets into more trouble than others same age.				
18. Speaks differently from others same age (baby talk; stuttering; hard to understand).				
19. Denies mistakes or blames others.				
20. Quarrelsome.				
21. Pouts and sulks.				
22. Steals.				
23. Disobedient or obeys but resentfully.				
24. Worries more than others (about being alone; illness or death).				
25. Fails to finish things.				
26. Feelings easily hurt.				
27. Bullies others.				
28. Unable to stop a repetitive activity.				
29. Cruel.				
30. Childish or immature (wants help he shouldn't need; clings; needs constant reassurance).				
31. Distractibility or attention span a problem.				
32. Headaches.				
33. Mood changes quickly and drastically.				
34. Doesn't like or doesn't follow rules or restrictions.				
35. Fights constantly.				
36. Doesn't get along well with brothers or sisters.				
37. Easily frustrated in efforts.				
38. Disturbs other children.				
39. Basically an unhappy child.				
40. Problems with eating (poor appetite; up between bites).				
41. Stomach aches.				
42. Problems with sleep (can't fall asleep; up too early; up in the night).				
43. Other aches and pains.				
44. Vomiting or nausea.				
45. Feels cheated in family circle.				
46. Boasts and brags.				
47. Lets self be pushed around.				
48. Bowel problems (frequently loose; irregular habits; constipation).				

TEACHER QUESTIONNAIRE
PROFILE FOR BOYS

PERCENTILE SCORES

%ile	CONDUCT PROBLEMS	HYPERACTIVITY	INATTENTIVE-PASSIVE	ADD INDEX
100	11	12	19	18
	10	11	18	17
90	9	10	17	16
	8	9	16	15
			15	14
			14	13
				12
	7	8	13	11
80	6	7	12	10
			11	9
		6	10	8
70	5		9	7
60	4	5	8	6
50	3	4	7	5
		3	6	4
40	2	2	5	3
	1	1	4	2
30			3	1

TEACHER QUESTIONNAIRE:

Conduct Problems:	Item	4	5	6	10	11	12	23	27			Total	
	Score	_	_	_	__	__	__	__	__			____	(3)
Hyperactivity:	Item	1	2	3	8	14	15	16					
	Score	_	_	_	__	__	__	__				____	(4)
Inattentive-passive	Item	7	9	18	20	21	22	26	28				
	Score	_	_	_	__	__	__	__	__			____	(7)
ADD Index:	Item	1	3	7	8	14	15	21	22	26	28		
	Score	_	_	_	__	__	__	__	__	__	__	____	(5)

____Norm Group: 208 males, ages 3 to 17.

( ) Parenthesis indicates average raw score for norm group.

Profile based upon nroms in an article by Goyette, Conners and Ulrich, Journal of Abnormal Child Psychology, 1978, Volume 6, pp 221-236.

PARENT QUESTIONNAIRE

PROFILE FOR BOYS

%ile	CONDUCT PROBLEMS	LEARNING PROBLEMS	PSYCHO-SOMATIC	IMPULSIVE-HYPERACTIVE	ANXIETY	ADD INDEX
100	11	7	3	9	3	16
	10			8		15
						14
90	9	6		7		13
	8			7		12
	7	5	2	6	2	11
80				5		10
	6					9
70		4				8
				4		
60	5					
						7
50	4	3	1	3	1	6
40	3	2		2		5
						4
	2			1		3
						2
30						
	1					
		1				1

PERCENTILE SCORES

PARENT QUESTIONNAIRE:

												Total	
Conduct Problems:	Item Score	2	8	14	19	20	27	35	39			______	(4)
Learning Problems:	Item Score	10	25	31	37							______	(3)
Psychosomatic:	Item Score	32	41	43	44							______	(1)
Impulsive Hyper-active	Item Score	4	5	11	13							______	(3)
Anxiety:	Item Score	12	16									______	(1)
ADD Index	Item Score	4	10	11	13	19	25	30	31	33	37	______	(6)

___Norm group 291 males, ages 3 to 17.

( ) Parenthesis indicates average raw score for Norm group.

Profile based upon norms in an article by Goyette, Conners and Ulrich, Journal of Abnormal Child Psychology, 1978, Volume 6 pp 221-236.

1/89

TEACHER QUESTIONNAIRE
PROFILE FOR GIRLS

Percentile Scores

%ile	CONDUCT PROBLEMS	HYPERACTIVITY	INATTENTIVE-PASSIVE	ADD INDEX
100	10	9	12	12-13
	9		11	11
	8	8	10	10
90	7	7	9	9
	6	6	8	8
80	5	5	7	7
			6	6
70	4	4	5	5
60	3	3	4	4
50	2	2	4	3
			3	
40	1	1		
			2	
30				
			1	
20				

TEACHER QUESTIONNAIRE:

												Total	
Conduct Problems:	Item	4	5	6	10	11	12	23	27				(2)
	Score	_	_	_	_	_	_	_	_			____	
Hyperactivity:	Item	1	2	3	8	14	15	16					(2)
	Score		_	_	_	_	_	_				____	
Inattentive-passive	Item	7	9	18	20	21	22	26	28				(4)
	Score	_	_	_	_	_	_	_	_			____	
ADD Index:	Item	1	3	7	8	14	15	21	22	26	28	☐	(3)
	Score	_	_	_	_	_	_	_	_	_	_		

___Norm Group: 175 females, ages 3 to 17.

( ) Parenthesis indicates average raw score for norm group.

Profile based upon norms in an article by Goyette, Conners and Ulrich. Journal of Abnormal Child Psychology, 1978, Volume 6, pp 221-236.

1/89

PARENT QUESTIONNAIRE
PROFILE FOR GIRLS

PERCENTILE SCORES ↑

%ile	CONDUCT PROBLEMS	LEARNING PROBLEMS	PSYCHO-SOMATIC	IMPULSIVE-HYPERACTIVE	ANXIETY	ADD INDEX
100						
	9-10	5-6	3	8	3	13-14
	8					12
90	7	4		7		11
						10
	6	3	2	6	2	9
80	5					8
				5		
70	4					7
				4		
60						6
50	3	2	1	3	1	5
40	2	1		2		4
						3
30	1			1		
						2
20						1

PARENT QUESTIONNAIRE:

												Total	
Conduct Problems:	Item	2	8	14	19	20	27	35	39				
	Score	__	__	__	__	__	__	__	__			____	(3)
Learning Problems:	Item	10	25	31	37								
	Score	__	__	__	__							____	(2)
Psychosomatic:	Item	32	41	43	44								
	Score	__	__	__	__							____	(1)
Impulsive Hyper-active:	Item	4	5	11	13								
	Score	__	__	__	__							____	(3)
Anxiety:	Item	12	16										
	Score	__	__									____	(1)
ADD Index:	Item	4	10	11	13	19	25	30	31	33	37	____	
	Score	__	__	__	__	__	__	__	__	__	__	____	(5)

__Norm group 238 females, ages 3 to 17.

( ) Parenthesis indicates average raw score for Norm group.

Profile based upon norms in an article by Goyette, Conners and Ulrich, _Journal of Abnormal Child Psychology_, 1978, Volume 6 pp 221-236.

THE MONTEREY QUESTIONNAIRE

Student: ______________________________

Date: ______________________________

Please rate the degree of each behavior for this student.

		NOT AT ALL						VERY MUCH			
1.	Fidgety/squirmy	1	2	3	4	5	6	7	8	9	10
2.	Out of seat	1	2	3	4	5	6	7	8	9	10
3.	Easily distracted	1	2	3	4	5	6	7	8	9	10
4.	Difficulty waiting turn	1	2	3	4	5	6	7	8	9	10
5.	Blurts out answers	1	2	3	4	5	6	7	8	9	10
6.	Difficulty following instructions	1	2	3	4	5	6	7	8	9	10
7.	Difficulty staying on task	1	2	3	4	5	6	7	8	9	10
8.	Fails to finish work	1	2	3	4	5	6	7	8	9	10
9.	Difficulty playing quietly	1	2	3	4	5	6	7	8	9	10
10.	Talks excessively	1	2	3	4	5	6	7	8	9	10
11.	Interrupts and butts in	1	2	3	4	5	6	7	8	9	10
12.	Difficulty in listening	1	2	3	4	5	6	7	8	9	10
13.	Loses things/disorganized	1	2	3	4	5	6	7	8	9	10
14.	Impulsive (does dangerous things)	1	2	3	4	5	6	7	8	9	10
15.	Work habit problems at school	1	2	3	4	5	6	7	8	9	10
16.	Social Behavior problems at school	1	2	3	4	5	6	7	8	9	10

TEACHER-STUDENT AGREEMENT

STUDENT:______________________________Date:__________

TEACHER:____

Note: This is a two week classroom test of this student's response to incentives. Use this agreement form and the stickers provided by the school psychologist to record all results:

1. Indicate start date on calendar.
2. Student or teacher places sticker on calendar date as the sticker is earned.
3. Record sticker earnings for 10 days only.
4. Teacher estimates before and after test work completion/accuracy for the student.

Earn one ☺ sticker for completing work on time accurately.

5 ☺ stickers possible daily.

Incomplete Work = No Sticker

10 ☺ stickers earns a special privilege

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY

TEACHER ESTIMATES:

	BEFORE AGREEMENT (circle)	RESULTS OF 2-WEEK TEST
% of work completed:	below 50 60 70 80 90	50 60 70 80 90 100
% correct:	below 50 60 70 80 90	50 60 70 80 90 100
Compared to class Average work was:	above average low well below	above average low well below

Monterey Peninsula Unified School District

Department of Special Education
Telephone (408) 649-1455

P.O. Box 1031
Monterey, California 93942-1031

PSYCHOLOGICAL REPORT

Name: BEN NAWDY Date: 6/21/89

Birthdate: 6/16/82 Age: 6-11 School: Monte Vista

Grade: One Teacher: Gotch Month/Year Tested: MAY 1989

REASON FOR REFERRAL:

Study Habits - Student tends to:
- Be easily distracted
- Not complete assignments
- Not work independently
- Give up easily

Social Behavior - Student tends to:
- Bother other students
- Be aggressive toward peers
- Be overly active

Teacher Comments:
(Main Concerns)

1. Short attention span
2. Difficulty with keeping on task
3. Difficulty solving problems with peers in a non-aggressive way; easily upset.
4. Academic learning is adequate but below level of ability.

BACKGROUND:

Family constellation: Lives with natural parents; only child.

Primary language of student: English

Entered M.P.U.S.D. at Kindergarten level.

Grades repeated: None

Health/Development information:

School vision test passed.
School hearing test passed.

General health is good with no history of serious illness or accidents.

Minor accident involving automobile (age 6); could have been serious; possibly due to impulsive response.

Height and weight appear to be low for age.

Personal grooming skills are excellent; well cared for

BACKGROUND (Continued)

Student is right handed.

Fine motor skills are normal.

Gross motor skills are normal.

Speech and language are within normal limits.

Mother responded "yes" to behavior problems noted by parents at home from an early age: overactive, distractible, unable to finish simple tasks, easily frustrated, impulsive, short attention.

OBSERVATIONS:

The teacher rating suggests a high incident of ADD primary symptoms in the classroom: distractible/inattentive/impulsive behavior and hyperactivity.

Behavior During Testing:

appeared squirmy and "excitable" in testing. Mild hyperactivity was noted: swung feet under table, out of seat, kneeling in chair, leaping into chair when asked to sit down, standing dufing testing. Impulsive responses to some test items; attention to tasks erratic.

TEST RESULTS:

5/18/89 WIDE RANGE ACHIEVEMENT TEST - R

	Grade Equivalent	Percentile	Standard Score
Reading	2M	81	113
Spelling	2M	91	120
Arithmetic	2M	94	123

WECHSLER INTELLIGENCE SCALE FOR CHILDREN (R)

Verbal IQ Score = 127
Performance IQ Score = 118
Full SCale IQ Score = 126
(See WISC-R Test Profile attached)

PARENT QUESTIONNAIRE (CONNERS RATING SCALE)

Parent rating was significantly high on the subscales of learning problems and Impulsive-Hyperactivity, i.e., above the 98th percentile. The Hyperkinesis Index was at the 99th percentile suggesting significant evidence of ADD symptoms as rated by parent.

TEACHER QUESTIONNAIRE (CONNERS)

The teacher rating was also significant. The ADD Index (presences of ADD symptoms) was at or above the 98th percentile. The inattentive-passive rating was normal while the subscales rating the presences of conduct problems and hyperactive behavior were highly significant.

CONCLUSIONS:

The test results were felt to be valid. Ben is a very intelligent child. Verbal abstract reasoning and expressive vocabulary are well above average for his chronological age.

Academic skills are developing and there is no evidence of a specific learning disability.

Ben does demonstrate significant problems in work habits and social behavior that appear to be related to the primary symptoms of an attention deficit disorder: inattentive, impulsive and hyperactive. These symptoms are present in all settings and have been observed since an early age.

The student is not eligible for Special Education placement under Title 5 Regulations.

There is not a significant discrepancy between ability and achievement.

RECOMMENDATION FOR MULTIDISCIPLINARY TEAM CONSIDERATION:

Program Placement:

1. Continue Regular Education; Promote to grade 2.
2. Refer to Dr. Rosen. Consider "trial" on Ritalin to help eliminate symptoms of Attention Deficit Disorder which have been observed consistently at home, school and in day care. These behaviors are becoming more significant in terms of creating interference with work habits, learning and especially social adjustment.
3. Continue to use a behavior management system to monitor behavior between home and school on a daily basis. Reward Ben for improvements in cooperation with peers, staying on task and impulse control. Consider a management system like the one accompanying this report.

Rich

Richard Morriss, Ph.D.
School Psychologist

Recommended resources for parent:

1) The ADD Hyperactivity Workbook for Parents, Teachers and Kids by Harvey C. Parker.
2) Your Hyperactive Child: A Parent's Guide to Coping With Attention Deficit Disorder - by Barbara Ingersoll.

WISC-R TEST PROFILE

WECHSLER INTELLIGENCE SCALE FOR CHILDREN–REVISED

NAME Ben Nawdy SEX Male REPORT DATE 5/18/89

.T DATE 89 5 18 SCHOOL Monte Vista GRADE 1

BIRTHDAY 82 6 16 CITY Monterey STATE CA

AGE 6 (YEAR) 11 (MONTH) (DAY) TEACHER Gotch

SCREENING TEST RESULTS:

TEST RESULT PROFILE

Circle Appropriate Scaled Score

PRESENT ACADEMIC SKILL LEVELS: 5/18/89

	G.E.	%ILE	STD. SC.
Reading	2M	81	113
Spelling	2M	91	120
Math	2M	94	123

	S.S.	Percentile
Verbal	127	
Performance	118	
Full Scale	126	

VERBAL SCALED SCORES

INFORMATION General Knowledge – Long Term Memory From Experience – Education	1	2	3	4	5	6	7	8	9	10	11	12	[✓ 13]	14	15	16	17	18	1
SIMILARITIES Relationships & Abstract Thinking – Association of Abstract Ideas	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	[✓ 18]	1
ARITHMETIC Enumerating – Reasoning – Sequencing – Computation, concentration	1	2	3	4	5	6	7	8	9	10	11	[✓ 12]	13	14	15	16	17	18	1
VOCABULARY Word Knowledge – Verbal Fluency – Receptive and Expressive Vocabulary	1	2	3	4	5	6	7	8	9	10	11	12	13	14	[✓ 15]	16	17	18	1
COMPREHENSION Practical Knowledge and Social Judgment – Reasoning – Logical Solutions	1	2	3	4	5	6	7	8	9	10	11	12	13	[✓ 14]	15	16	17	18	1
DIGIT SPAN ttention, Concentration, Rote & Immediate Memory – Sequencing	1	2	3	4	5	6	7	8	9	10	11	12	[✓ 13]	14	15	16	17	18	1
ERBAL I.Q.	–45	50	57	64	69	75	81	87	94	100	106	112	118	124	131	139	145	152	155-

PERFORMANCE SCALED SCORES

PICTURE COMPLETION Visual Memory & Alertness to Details	1	2	3	4	5	6	7	8	9	10	11	12	[✓ 13]	14	15	16	17	18	1
PICTURE ARRANGEMENT Interpretation of Social Situation – Sequencing – Visual Alertness	1	2	3	4	5	6	7	8	[✓ 9]	10	11	12	13	14	15	16	17	18	1
BLOCK DESIGN Reproduce Design from Pattern – Visual Perception	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	[✓ 16]	17	18	1
OBJECT ASSEMBLY Reproduce Familiar Forms from Memory – Visual Retention	1	2	3	4	5	6	7	8	9	10	11	12	13	[✓ 14]	15	16	17	18	1
CODING Speed and Accuracy of Learning Meaningless Symbols – Immediate Visual Memory – Motor Coordination	1	2	3	4	5	6	7	8	9	10	[✓ 11]	12	13	14	15	16	17	18	1
MAZES Planning & Following Visual Pattern	1	2	3	4	5	6	7	8	9	10	11	[✓ 12]	13	14	15	16	17	18	1
PERFORMANCE I.Q.	–45	46	54	61	68	73	80	86	92	100	106	114	121	129	135	142	149	155+	
FULL SCALE I.Q.	–40	44	51	59	67	72	79	85	92	100	106	114	122	129	138	144	151	157	160
PERCENTILE RANK		←		–1	+1	2	8	16	32	50	64	84	92	98	99+	→			

← RETARDED →	← AVERAGE →	← SUPERIOR →
Sub-Trainable Trainable Educable	Borderline Slow Learner Bright Average Rapid Learner	Superior Learner Very Superior Gifted

ISCREPANCIES .(Special Education eligibility):

Consulting Psychologists Press
577 College Avenue, Palo Alto, California 94306

The Two Week High Protein Breakfast Trial

SUGGESTED HIGH PROTEIN FOODS
for the
INATTENTIVE CHILD
A.M. FEEDING

BREAKFAST

___ cooked eggs - whole wheat toast

___ cooked eggs - meat

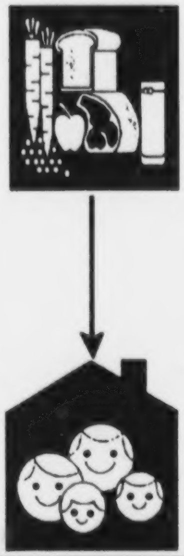
___ cooked eggs -cheese

___ cold cereal - whole milk (all milk consumed)

___ peanut butter on whole wheat toast or whole wheat waffle (jelly ok)

___ protein powder and milk (e.g., Instant Breakfast)

___ flavored yogurt on whole wheat waffle



SNACK

___ 2 handfuls of unsalted peanuts with 1 handful of raisins

___ peanut butter and jelly sandwich

___ string cheese

- DON'T EAT MORNING FOODS CONSISTING OF PRIMARILY CARBOHYDRATES AND SUGAR (e.g., pancakes and syrup)
- Call teacher on Thursdays to see if the protein at breakfast helps improve concentration at school.
- Write on calendar what child ate for breakfast.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				Call teacher about behavior		
				Call teacher about behavior		

CH.A.D.D.

CHILDREN WITH ATTENTION DEFICIT DISORDERS

"Parents Supporting Parents"

CH.A.D.D. CHAPTER FORMATION MANUAL

We were pleased to hear of your interest in CH.A.D.D. and in the possibility of your starting a CH.A.D.D. chapter in your community. To further acquaint you with CH.A.D.D. the following is a brief history of the organization, a description of its objectives, an outline of the corporate structure, and a practical step-by-step guide to setting up a chapter in your community. Also please find sample copies of CH.A.D.D. Membership brochures and a CHADDER newsletter so you can see what we're all about. For more information please fill out and mail the Chapter Formation Response Form attached to the Chapter Manual

HISTORY OF CH.A.D.D.

CH.A.D.D. was started in 1987 in Plantation, Florida by a group of parents of children with attention deficit disorders and by local professionals who had an interest in working with these children. Because there was a noticeable lack of up to date information within the lay community about attention deficit disorders and few available forums by which parents could communicate with one another an organization designed for parents seemed to be needed. We were surprised to see just how great this need was! We began by holding monthly parent meetings which served as both a support group and as a setting for informational programs about attention deficit disorders. Rather quickly, our meetings began to become quite popular, attracting hundreds of parents. News of CH.A.D.D. spread rapidly and pretty soon we were getting calls from parents in neighboring communities and throughout the country asking us to assist them in forming CH.A.D.D. chapters closer to them.

OBJECTIVES OF CH.A.D.D.

With interest rapidly growing in CH.A.D.D. a more formal corporate structure was needed leading to the formation of CH.A.D.D. of Florida Inc. d/b/a/ CH.A.D.D., a non-profit corporation. A board of directors was established and a slate of officers directly responsible to the board of directors was appointed to oversee the development and operation of the organization and the formation of chapters. Each chapter, in turn, would elect from its membership a slate of officers to meet the overall objectives of CH.A.D.D. at the local level. These objectives, as outlined in the by-laws, are as follows:

(i) To maintain a support group for parents who have children with attention deficit disorders;

(ii) To provide a forum for continuing education for both parents and professionals about attention deficit disorders;

(iii) To be a community resource for information about attention deficit disorders;

(iv) To protect the best interests of children with attention deficit disorders;

(v) To foster the objectives that the best educational experiences should be available to children with attention deficit disorders so that their specific difficulties will be recognized within educational settings.

Chapter Professional Advisory Board

Each chapter is encouraged to enlist the assistance of professionals in their area who have an interest in attention deficit disorder. These professionals make up the Professional Advisory Board and should include individuals in the fields of pediatrics, neurology, psychology, psychiatry, psychiatric social work, education, law, and business. The purpose of the advisory board is to voluntarily assist the chapter officers in the planning of monthly parent meetings, in providing presentations for monthly meetings, and in the distribution of information about CH.A.D.D. to other parents in the community.

MEMBERSHIP

Membership in CH.A.D.D. is open to any person who has an interest in attention deficit disorders and who has paid the required membership dues. Membership will likely consist of parents, teachers, medical and other non-medical professionals. However, since this is primarily a parent organization membership will be heavily weighted with parents of children with attention deficit disorder. Members must complete a Membership Form, select the type of membership they would like (Regular $25 dues, Professional $50 dues, or Contributing $50 dues), make payment of annual membership dues to CH.A.D.D., Suite 185, 1859 N. Pine Island Road, Plantation, Florida 33322, and be accepted by the Board of Directors.

When a new member is admitted to the Chapter, or an existing member renews membership, that member's dues is handled in the following manner. All membership dues and Membership Forms are generally sent directly to CH.A.D.D., after which time CH.A.D.D. provides to the Chapter the completed Membership Form of its new and/or renewed members along with reimbursement of 50% of said dues within 30 days of receipt of same; provided, however, that the first $250 of the initial start-up dues collected by a developing chaper will be retained by CH.A.D.D. to cover the initial chapter start-up fee. The purpose of the chapter start-up fee is to cover the administrative costs incurred by CH.A.D.D. to assist in the start of a developing chapter and to pay for the printing and mailing of newsletters, membership brochures, and informative material related to attention deficit disorders which will be sent to the developing chapter.

HOW TO START A CH.A.D.D. CHAPTER

If you are interested in starting a CH.A.D.D. chapter in your community you might want to start with the following steps:

1. Take a deep breath!

2. Contact one or more local professionals with a strong interest in attention deficit disorders who would be willing to assist you in the formation of the chapter. We would suggest at least one mental health professional and one physician. These professionals may be able to direct you to other parents who would be interested in forming the chapter.

3. Form a steering committee made up of parents and professionals. The purpose of the steering committee will be to appoint acting officers to begin to conduct the business of the developing chapter.

4. The steering committee could begin to identify local professionals who could be asked to serve on the interdisciplinary Professional Adviosry Board of the developing chapter.

5. The steering committe could select a location and time to hold meetings. Many chapters hold meetings in hospitals, school board facilities, religious institutions, etc. It is easy to acquire a room for meetings without charge. Your meeting room should have a public address system and should be able to accomodate around 100 to 150 people depending on the size of your community.

6. Select a program for your first meeting. A general introduction to attention deficit disorders followed by an introduction of members of the steering committee and an overview of CH.A.D.D. is usually a good initial program. Plan about two hours for your first meeting and have a notebook handy to register the names, addresses, and telephone numbers of those people in attendance so you could contact them later on for future meetings. Have a flyer available announcing the topic and time of your next meeting. Also have a sufficient number of CH.A.D.D. brochures, CHADDER newsletters, and other published material on hand for distribution. We will be happy to supply you with this material before your first meeting.

7. Discuss with the steering committe ways to market your first meeting. We have found that the best results come from a 2X4 inch ad placed in the local newspaper announcing the topic, time, and location of your meeting. The cost of such an ad could be raised via donations from members of the steering committee and could be reimbursed after your chapter begins to get reimbursed dues monies from new members. Another good method of marketing is through distribution of "flyers" announcing the meetings. Flyers can be sent to public and private schools, pediatric and psychologist offices, etc. along with CH.A.D.D. brochures to describe the organization and attention deficit disorders.

Once you've had your first meeting and you feel a bit more confident it is easy to contact a local newspaper which might be interested in doing a human interest story on attention deficit disorders and on what your CH.A.D.D. chapter is trying to accomplish.

8. By this time you should begin to have some enthusiasm going and volunteers will be offering their time and energy to assist in developing the chapter. It is important to respond to a volunteers' offer to help very quickly so that you acknowledge their willingness to be involved.

9. Your steering committee could be planning future programs. We have found that the following topics are extremely popular:

Introduction to ADD
Medical Management of ADD
School Issues in ADD
Home Management of Children With ADD
Assertive Discipline
Raising Self-Esteem
ADD: A Family Problem
Parents As Child Advocates

We have tried to structure meetings to last about two hours (although we always run over). The first half of the meeting is usually devoted to the speakers' presentation (no more than 30 to 40 minutes) and the second half is devoted to parents who may be asked to break down into small groups to discuss their personal concerns with regard to raising an ADD child. There are usually enough professionals in the audience to assist in facilitating each of the small groups.

10. After you've had a couple of monthly parent meetings you will want to reserve part of a meeting to elect officers for the developing chapter who will take on the responsibility for conducting the business of the chapter.

11. After a developing chapter has reached a level of membership equal to $250 in membership dues and has executed the Chapter Agreement it can become an official CH.A.D.D. Chapter. The Chapter Agreement. defines the objectives of CH.A.D.D., the duties of CH.A.D.D, and of the Chapter, the establishment of a chapter bank account, and dues and other financial matters. A copy of the Chapter Agreement will be sent to you on request.

As you can see, forming a CH.A.D.D. chapter is no small undertaking. However, for all of us involved in CH.A.D.D. it has been an emotionally enriching experience. The response from parents has been overwhelmingly positive and in the end we know the children are benefitting from their parents' involvement. If your are interested in starting a chapter of CH.A.D.D. in your community please fill out the attached Chapter Formation Response Form and return it to us.

Cordially,

Fran Gilman
President

Harvey C. Parker, Ph.D.
Executive Director

Parent Support Groups and Associations

ACLD, Inc.
Association for Children and Adults
with Learning Disabilities
4156 Library Road
Pittsburgh, Pennsylvania 15234
(412) 341-1515

Attention Deficit Disorder Association of Texas
P.O. Box 61592
Houston, Texas 77208-1592

Children With Attention Deficit Disorder (CH.A.D.D.)
National Headquarters
Suite 185
1859 N. Pine Island Road
Plantation, Florida 33322
(305) 384-6869
(305) 792-8100

California Chapters: Ch.A.D.D.

CH.A.D.D. of Antelope Valley
Nancy Smith,
Parent Coordinator

CH.A.D.D. of Los Angeles
Stanley & Kris Ruskow,
Parent Coordinators

CH. A. D. D. of Roseville and Greater Sacramento
Diane Contos and Sue Thorpe,
Parent Coordinators

CH.A.D.D. of Sonoma County
Lois Standring,
Parent Coordinator

CH.A.D.D. of Tri-Valley Area
Sandy Rounds,
Project Coordinator

Council for Exceptional Children
This is the branch of the National Education Association for educators in special education.
1920 Association Drive
Reston, Virginia 22091

Foundation for Attentional Disorders
Box 339 Station D
Toronto, Ontario M6P 3J9
Canada

HAAD Hyperactive Attention Deficit
2910 Fleetwood Avenue S.E.
Roanoke, Virginia 24015

Illinois Association for Hyperactivity and Attention Deficit Disorder
507 Thornhill Drive
Carol Stream, Illinois 60188
(312) 653-0222

New England Attention Disorders (NEAD)
P.O. Box 82
Northboro, MASS 01532
(508) 393-8039

STUDENT: ________________ **Date:** ______

TEACHER: ______________________________

PARENT: _______________________________

BED TIME AGREEMENT

BED TIME IS

____

Earn 1/2 hour of extra T.V. for good note home.

***plus star on chart**

☺

Cost for a bad day is 1/2 hour early bed time. *NO STAR.*

☹

STAR CHART

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY

***10 STARS EARNS A SPECIAL AWARD**

DAILY REPORT CARD

☻ ☐

☹ ☐

DATE ____/____/____

____
Teacher

DAILY REPORT CARD

☻ ☐

☹ ☐

DATE ____/____/____

____
Teacher

DAILY REPORT CARD

☻ ☐

☹ ☐

DATE ____/____/____

____
Teacher

DAILY REPORT CARD

☻ ☐

☹ ☐

DATE ____/____/____

____
Teacher

******* WEEKLY REPORT *******

NAME________________________________ DATE____________

VG = Very Good ☺
S = Satisfactory
NI = Needs Improvement

o ACADEMIC

	M	T	W	Th	F
• Completes assignments neatly					
• Stays on Task					
• Finishing work on time					
• Homework					

✱ Comments:

____

o BEHAVIOR

	M	T	W	Th	F
• Behavior in group					
• Getting along with others					
• Respect for peers					
• Respect for adults					
• Follows directions					

✱ Comments:

____

ABSENCES: M T W TH F **TARDIES: M T W TH F**

✱ ***PLEASE SIGN AND RETURN THIS SHEET. Your comments are welcome.***

____

Parent signature

You were

Not fair good great fantastic

ON TASK

Target

During ____________________

Earned 0 5 10 20 25 points

Date ____________________

Bonus __________ (completed tasks)

You were

Not fair good great fantastic

ON TASK

Target

During ____________________

Earned 0 5 10 20 25 points

Date ____________________

Bonus __________ (completed tasks)

You were

Not fair good great fantastic

ON TASK

Target

During ____________________

Earned 0 5 10 20 25 points

Date ____________________

Bonus __________ (completed tasks)

You were

Not fair good great fantastic

ON TASK

Target

During ____________________

Earned 0 5 10 20 25 points

Date ____________________

Bonus __________ (completed tasks)

FACTS ABOUT ADD (Demystification)

PRIMARY SYMPTOMS:

1. Inattention/distractable
2. Impulsive
3. Hyperactive

PROBLEMS:

- The primary symptoms of Attention Deficit Disorder (ADD) can occur in any combination and to any degree; sometimes hyperactivity is only mild or not a problem.
- Even in its mildest forms, ADD can interfer significantly with learning; work habits and/or social behavior; therefore, ADD can cause all sorts of problems for the child at school.
- Associated problem behaviors include:
  - doesn't finish work
  - doesn't seem to listen
  - easily distracted
  - problems of sustained attention
  - acts without thinking
  - constantly shifts activities
  - poorly organized
  - needs supervision
  - talks out
  - out of seat
  - fidgety/squirmy
  - can be restless & overactive
  - learned agressive behavior
- These problem behaviors are usually a bigger problem at school than at home.

CAUSES:

It's generally agreed that ADD is a physically-based disorder. However, the specific nature of its physical basis is still open to scientific investigation. A dysfunction in "neurotransmitter metabolism" has been postulated as one cause of ADD, while central nervous system immaturity and specific developmental trauma (e.g., head injury, prenatal drug exposure, etc.) have also been considered as a possible cause.

PARENTS:

- Parents may notice ADD symptoms in their children as early as infancy and toddlehood. Teachers often describe ADD children as restless, inattentive, easily distracted and overly-impulsive.
- Frustrated, upset and anxious parents do not cause their children to have ADD. On the contrary, ADD children usually cause their parents to be frustrated, upset and anxious.
- When aggressive behavior is also a problem, special parent training is recommended.

FACTS:

- It's estimated that 3% to 5% of the population of children in the United States are ADD. Boys are anywhere from three to nine times more likely to have ADD than girls. If the incidence is only 3%, there is still one child in every classroom with the disorder.
- In school, ADD children may have problems organizing their work, listening to directions, writing neatly, and finishing their assignments. However, when they are particularly interested in something like a movie or computer program, ADD kids have no trouble at all paying attention.
- Of course, not all children who exhibit these symptoms do so as a result of a true attention deficit disorder. Disorganized home or school environments, emotional difficulties within the child, or lack of motivation can cause similar symptoms. The difference for ADD children is that under normal conditions, they lack the physical ability to control their behavior; this is the bio-physical nature of the true ADD child.
- It is important to know what ADD is not. It is not a form of mental retardation. ADD children usually are of at least average intellectual potential; many are more than average. They are not primarily emotionally distrubed children; although, many will develop emotional problems. The emotional problems these children have do not cause the academic difficulties; the academic difficulties cause the emotional problems.
- ADD occurs across all cultures, ethnics and socioeconomic levels as a physiological disorder.
- Children with ADD are more easily identified when hyperactivity is a prominent symptom. When hyperactivity is not a prominent symptom, diagnosis is more difficult.
- ADD is often (at least 50%) associated with learning disabilities (LD). ADD can cause a learning disability and LD can precipitate ADD symptoms; the later is not true ADD.
- Children with ADD are more easily identified when hyperactivity is a prominent symptom. When hyperactivity is not a prominent symptom, diagnosis is more difficult.
- ADD children who develop aggressive behaviors like fighting, stealing and lying often (at least 50%) exhibit serious conduct problems in adolescence and anti-social behavior as adults.

THE TREATMENT FOR ADD

The common forms of treatment for ADD are listed below. ***Combinations*** of treatments are often necessary. Medication is usually recommended for children with moderate to severe forms of ADD so that other treatments are maximally effective.

A. Educational (School-based treatment)
   1. Generic classroom strategies
   2. Special education programs
   3. Behavior Management

B. Counseling (parent and child)
   1. Demystification
   2. Cognitive behavioral therapy (CBT)
   3. Parent support groups

C. Medical (pediatrician, psychiatrist, neurologist)
   1. Medication
      a. Stimulants (e.g., Ritalin)
      b. Anti-depressants (e.g., Trofanil)
   2. Diet management
      a. High protein breakfast
      b. Allergy control

D. Parent training (home-based)
   1. Parent training in behavior management
   2. Deliver medical treatment
   3. Follow through of home/school monitoring
   4. Counseling

Without appropriate treatment, ADD can cause school failure, rejection by peers and family turmoil, all of which can lead to developmental delays and psychiatric complications stemming from low self-esteem and frustration. The prognosis is particularly poor for those children that develop aggressive behavior in addition to the primary symptoms of ADD. The worst form of ADD (aggressive) can often lead to oppositional, anti-social and even criminal behavior.

ASSESSMENT SUMMARY FOR PARENTS

Child's Name: ____________________
Teacher: ____________________
School Psychologist ____________________
Date: ____________________

PROBLEM:

PROFILE SUMMARY

1. Learning potential (verbal)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
2. Learning potential (non-verbal)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
3. Visual skills	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
4. Auditory skills	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
5. Fine motor skills	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
6. Gross motor skills	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
7. Attentional behavior	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
8. Class work habits	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
9. Social behavior	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

ACADEMIS SKILLS

1. Reading	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
2. Spelling	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
3. Arithmetic	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
4. Writing	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

52 60 68 75 | 84 90 100 110 116 | 125 132 140 148

Percentile 1 2 5 | 16 25 50 75 84 | 95 98 99 Scores

LOW AVERAGE HIGH

COMMENTS

Strengths

Weaknesses

CONCLUSIONS: (Circle one)

1. Eligible for Special Education: yes no maybe
2. Type of Program (if eligible):
    a) Learning Handicapped RSP SDC
    basis of eligibility LIF LD
    b) Communicatively Handicapped Therapy SDC
    c) Physicially Handicapped ________
    d) Severely Handicapped ________
3. Attention Disorder yes no maybe
4. Other ____________________

RECOMMENDATIONS TO PARENTS

We have circled the treatment recommendations that we believe are approriate for your child at the present time. These recommendations were discussed with you at our meeting on ______________________________.

1. *Generic classroom strategies*: These include general suggestions to the teacher that might help your child with the problem.

2. *Behavior Management Systems:*
   e.g., teacher-student agreement, home-school agreement

3. *Parent training (behavior management):*
   a. Demystification
   b. References: ____
   c. Consider referral to ____

4. *Consider support services:*
   a. Parent support group
   b. Family counseling
   c. School based counseling for student

5. *Diet Management:* Consider a trial on a high protein breakfast

6. *Refer to doctor* to consider a medical intervention (e.g., a trial on medication). Please note that this recommendation usually applies to students who have serious problems related to a suspected attention disorder.

7. *Special education program placement* (see IEP for type of program and the goals and objectives for placement).

8. *Other recommendaitons:* ____
   ____
   ____
   ____

Parent information regarding medical intervention recommendation:

As a parent only you can make the decision to consider this recommendation. There is no physical test, like a blood test, to diagnose that your child has an attention disorder. The diagnosis that we have made is based upon the tools that we have used within the school setting, including test results, health history (completed by you), observations, behavioral rating scales and school records. From the school setting we can only suggest that your child may be a candidate for a "trial" on medication, if his/her problems at school are severe enough to warrant such a recommendation and other interventions have failed.

We cannot prescribe medication nor can we force you into making such a decision. If we have made the recommendation to consider a trial on medication and you are in agreement, we must then get the approval of your doctor. On the basis of our thorough evaluation of your child that demonstrates that s/he has an attention disorder due to suspected physical causes, we need to show evidence to the doctor. The report prepared by the school psychologist will be sent to your child's doctor before your appointment.

Instructions to parent:

_____ 1. Make an appointment with your child's doctor to discuss a possible medical treatment for your child.

_____ 2. Leave a message for the school psychologist regarding the appointment time, date and doctor's name. (Phone: ______________________________)

_____ 3. Please sign the release of information form so that we can send our report to your doctor before the appointment.

_____ 4. You may want to talk to a parent of an ADD child who is now on medication. If so, ask us for contacts.

Teacher Sanchez

Grade 5th

MONTEREY PENINSULA UNIFIED SCHOOL DISTRICT
P.O. Box 1031
Monterey, CA 93942-1031

PERMIT TO TAKE MEDICATION IN SCHOOL

To be completed by parent or guardian:

Student name Aaron School Bayview

I request that my child be allowed to take medication at school at ______ a.m. 12:15 p.m. according to instruction from his/her physician. I understand it is my responsibility to send the medication to school in an original container labeled with the child's name and the instructions. While the school will make every effort to cooperate, the child must assume the responsibility for obtaining the medication in the office.

Date 10/3/89 Signature Jacqueline
Parent or Guardian

- -

To be completed by physician:

Diagnosis A.D.D.

Medication and Instructions Ritalin 10 mg at home)
(takes am at home

Medication requested for 1989-90 shool yr.
Length of time

Comments ______

Date 10/3/89 Signature of physician Dr. E. Barnes / Ft. Ord Pediatrics

11/14/88

Copy from prescription bottle

[illegible] RN

TEACHER QUESTIONNAIRE FOR MEDICATION SIDE EFFECTS

Child's Name: ____________________
Teacher: ____________________
School Psychologist: ____________________
Date: ____________________

INSTRUCTIONS: This student is now on medication and the doctor will need to know if there are any significant side effects. Please rate each behavior from 1 to 5. 1 means that you have not observed this behavior. A 5 means that the behavior is a severe problem. If the behavior occurs at a certain time each day, please note that beside the scale. Please circle only one number beside each item.

BEHAVIOR	**Absent——————Serious**					**Time**
Neuro						
Tics or Twitches	1	2	3	4	5	
Stares or Daydreams	1	2	3	4	5	
Dizziness	1	2	3	4	5	
Somatic						
Decreased Appetite	1	2	3	4	5	
Stomachache	1	2	3	4	5	
Headache	1	2	3	4	5	
Bites Nails	1	2	3	4	5	
Social						
Sad or Unhappy	1	2	3	4	5	
Angry	1	2	3	4	5	
Mood Swings	1	2	3	4	5	
Cries	1	2	3	4	5	
Depressed	1	2	3	4	5	
Irritable	1	2	3	4	5	
Interacts	1	2	3	4	5	
Sleep						
Yawns	1	2	3	4	5	
Can't Sleep	1	2	3	4	5	
Nightmares	1	2	3	4	5	

Monterey Peninsula Unified School District

BOARD OF EDUCATION
Jacqueline Boynton · Nellie Lewis
Edith Johnsen · Ira Lively
Carl Johnson · John Mason
Kathrina Ognyanovich

James C. Harrison, Superintendent

Date: ________________

Dr. ______________________________
____
____

Re: ______________________________

Dear Dr. ______________________

______________________________ has been receiving medication (name of medication: ______________________________) to reduce problems associated with an attention disorder. (Dosage: __________ mg __________ times daily).

After two to three weeks we have observed no mild/ moderate/ marked/ miraculous/ improvement of problem behaviors. *(circle one)*

The behavior rating scale used in diagnosis was re-administered (copy enclosed) and the results during medication compared to those obtained before medication show:

____
____
____
____

Please note that a side effects checklist is also enclosed.

In discussion with ______________________'s teacher, it is our opinion that termination/ adjustment of dosage/continuation/of medication for this child is appropriate. We have communicated this information to ____________________'s parents and await their response.

Please feel free to contact me at anytime regarding this matter, if necessary. My phone number is 649-1455.

Sincerely,

School Psychologist

__/ms

P O Box 1031, Monterey, CA 93942-1031

Administration/Instruction	Business	Personnel	Public Information	Board of Education/Superintendent
649-1565	659-1568	649-1545	649-1561	649-1554

Monterey Peninsula Unified School District

JAMES C. HARRISON, Superintendent

BOARD OF EDUCATION
Jacqueline Boynton
Edith Johnsen
Carl Johnson
Nellie Lewis
Ira Lively
John Mason
Kathrina Ognyanovich

12/18/87

Dr. Thomas Burchard
Community Hospital
Holman Highway
Monterey, CA 93921

Re: David Wright

Dear Dr. Burchard:

David has been receiving medication to control behavior and improve concentration and attention at school. After thirty days we have observed miraculous improvement of problem behaviors.

The Conner's Hyperkinesis Scale was re-administered (copy enclosed) and the results during medication compared to those obtained before medication show significant reduction in problematic symptoms associated with an attention disorder.

In discussion with David's teacher, it is our opinion that continuation of medication for this child is appropriate. We have communicated this information to David's mother.

Please feel free to contact me at any time regarding this matter, if necessary. My phone number is 649-1455.

Sincerely,

Richard Morriss, Ph.D.
School Psychologist

RM/ms

P.O. Box 1051 Monterey, CA 93942-1051

Administration/Instruction 649-1565
Business 649-1568
Personnel 649-1545
Public Information 649-1562
Board of Education/Superintendent 649-1554

Teacher's Questionnaire

Name of Child David **Grade** 2

Date of Evaluation Dec. 16 1987

Please answer all questions. Beside *each* item, indicate the degree of the problem by a check mark (✓)

post - medication report

	Not at all	Just a little	Pretty much	Very much
1. Restless in the "squirmy" sense.	X			
2. Makes inappropriate noises when he shouldn't.	X			
3. Demands must be met immediately.	X			
4. Acts "smart" (impudent or sassy).	X			
5. Temper outbursts and unpredictable behavior.	X			
6. Overly sensitive to criticism.	X			
7. Distractibility or attention span a problem.	X			

very 'focused'

8. Disturbs other children.	X			
9. Daydreams. very seldom	X			
10. Pouts and sulks.	X			
11. Mood changes quickly and drastically.	X			
12. Quarrelsome.	X			
13. Submissive attitude toward authority.	X			
14. Restless, always "up and on the go."	X			

15. Excitable, impulsive.	X			
16. Excessive demands for teacher's attention.	X			
17. Appears to be unaccepted by group.	X			
18. Appears to be easily led by other children.	X			
19. No sense of fair play.	X			
20. Appears to lack leadership.	X			
21. Fails to finish things that he starts.	X			

22. Childish and immature.	X			
23. Denies mistakes or blames others.	X			
24. Does not get along well with other children.	X			
25. Uncooperative with classmates.	X			
26. Easily frustrated in efforts.	X			
27. Uncooperative with teacher.	X			
28. Difficulty in learning.	X			

There has been a major change in David's academic behaviour He sits in his chair, can focus + complete his tasks! He is also more organized (w/ his desk + personal belongings).

YEAH!! meds!

Distributed by Abbott Laboratories, North Chicago, IL60064

U.S.A.

ORDER FORM

Use this form to order ***Attention Disorders in School Age Children*** or the parent/teacher guide ***Children with Attention Disorders in School.***

Order to be mailed to:

Name: ______________________

Address: ______________________

____

______________________ Zip __________

Quantity	**Attention Disorders in School Age Children: The Role of the Psychologist in Diagnosis and Treatment**		
______	@ $17.00 each	=	$______
	Children with Attention Disorders in School: Parent/ Teacher Guide		
______	@ $3.00 each	=	$______
		Sub total	$______
		6% Sales tax	$______
		Shipping & Handling (see scale below)	$______
		Total Enclosed	$______

Shipping/Handling

If book cost:	S/H is:
$3–$10	$1.00
10–20	$2.00
21–50	$3.00
51–100	$4.00

Make checks payable to:

Richard Morriss, Ph.D.
P.O. Box 2496
Carmel Valley, CA 93924

BIBLIOGRAPHY

Abikoff, H. and Gittelman, R. Hyperactive children treated with stimulants, ss cognitive training a useful adjunct? *Archives of General Psychiatry*, 42: 953-991, 1985.

Achenbach, T.M., Edelbrock, C.S. *Manual for the child behavior checklist and revised child behavior profile.* Burlington, VT; T.M. Achenbach. 1988.

Ackerman, P.T. , Dykman, R.A. and Peters, J.E. Hierarchical factors patterns on the WISC as related to areas of learning deficit. *Perceptual and Motor Skills*, 42: 583-615, 1976.

American Psychiatric Association. *Diagnostice and Statistical Manual of Mental Disorders* (3rd ed.). Washington, D.C. American Psychiatric Association, 1980.

Barkley, Russel A., Cunningham, C.E. The effects of methyphenidate on the mother-child interactions of hyperactive children. *Archives of General Psychiatry*. 36: 201--208, 1979.

Barkely, Russel A. *Hyperactive Children: A Hnadbook for Diagnosis and Treatment*. New York: Guilford Press, 1981.

Barkley, Russel A., Karlsson, J., Strzelecki, E. and Murphy, J.V.: Effects of age and ritalin dosage on the Mother-Child Interactions of Hyperactive Children. *Journal of Consulting and Clinical Psychology* 52: 750-758, 1984.

Behar, D., Rappport, J. L., Adams, A.J., Berg, C.J. & Cornblath, M.: Sugar challenge testing with children considered behaviorally "sugar reactive". *Nutrition and Behavior* 1: 277-288, 1984.

Bennett, Barbara, M.D. Position paper presented, *Prenatal Drug Exposure*. CASP Workshop, San Francisco: "Overview of In Utero Drug Exposure", October, 1989.

Berry, C.A., Shaywitz, S.E. and Shaywitz, B.A. Girls with Attention Deficit Disorder: A Silent Minority? A Report on Behaviorial and Cognitive Characteristics. *Pediatrics,* vol. 76, 1985.

Bohlene, David S. Intellectural and affective characteristics of attention deficit disordered children. *Journal of Learning Disabilities*. vol. 18, number 10, December, 1985.

Bosco, J. J., & Robin, S.S. Hyperkinesis: Prevalence and treatment. In C.K. Whalen & B. Henker (Eds.), *Hyperactive children: The social ecology of identification and treatment* Orlando, FL: Academica Press, 1980.

Bradley, C. The behavior of children receiving Benzedrine. *American Journal of Psychiatry*. 94: 577-585, 1937.

Brenner, A. (1982). The effects of megadoses of selected B complex vitamins in children with hyperkinesis: Controlled long-term followup. *Journal of Learning Disabilities*, vol. 15: 258-264, 1982.

Brown, R.T., M.E. Wynne, and R. Medenis. "Methylpenidate and cognitive therapy: A comparison of treatment approaches with hyperactive boys. *Journal of Abnorama. Child Psychology.* vol. 13, 1985.

Canter, Lee. *Assertive Discipline for Parents.* California: Canter & Associates, 1982.

Canter, Lee. *Homework Without Tears: A Parent's Guide for Motivating Children to do Homework and to Suceed in School.* New York: Harper and Row, 1987.

Cantwell, Dennis P. Psychiatric illness in the families of hyperactive children. *Archives of General Psychiatry*. 27: 414-417, 1972.

Cantwell, D. P. & Carlson, G.A. Stimulants. In J.S. Werry (Ed.), *Pediatric psychopharmacology: The use of behavior modifying drugs in children.* New York: Brunner/Mazel, 1978.

Coleman, Wendy. *Attention Deficit Disorders, Hyperactivity and Associated Disorders: A Handbook for Parents and Proffessionals* (5th edition). Madison, Wisconsin: Calliope Books, 1988.

Conners, C.Keith, & Rothchild, G.H. Drugs and learning in children. In J. Hellmuth(Ed.), *Learnrng Disorders* (Vol. 3). Seattle, WA: Special Child, 1968.

Conners, C. Keith. Drugs in the management with learning disabilities. In L. Tarnopol (Ed.), *Leanring disorders in children: Diagnosis, medication, education* Boston: Little, Brown, 1971.

Conners, C. Keith. "Nutritional Therapy in Children" from *Nutrition and Behavior*. (ed) Janina R. Gallen, Pleinum Publishing Corp., 1984.

Conners, C.Keith. The computerized continuous performance test. *Psychopharmacology Bulletin*, 21: (4), 891-892, 1985.

Conners, C.Keith, & Wells, L.C. *Hyperkinetic children: A neuropsychosocial approach*. Beverly Hills: Sage, 1986.

Conners, C. Keith. *The Continuous Performance Test* (IBM). Multi-Health Systems: New York, 1989.

Conners, C. Keith. *Feeding the Brain: How Foods Affect Children.* New York: Plenum Press, 1989.

Cooper, Shawn. *The Clinical Use and Interpretation of the Wechsler Intelligence Scale for Children - Revised.* Springfield, Illinois: Charles C. Thomas, publisher, 1982.

Douglas, Virginia. Stop, look, and listen: The problem of sustained attention and impuse control in hyperactive and normal children. *Canadian Journal of Behavioral Science*, 1972.

Douglas, Virginia. Attention and cognitive problems. In Rutter, M. (Ed.), *Developmental neuropsychiatry*. London: The Guilford Press, 1983.

Dulcan, Mina K. Comprehensive treatment of children and adolescents with attention deficit disorder, *Clinical Psychology Review*. Vol. 6: .539-569, 1986.

Edelbrock, C., Costello. A.J., Kessler, M.D. Empirical coroboration of attention deficit disorder. *Journal of the American Academy of Child psychiatry*. 23: 285-290. 1984.

Eisenberg, L., & Conners, C.K. Psychopharmacology in childhood. In N.B. Talbot, J. Kagan, & L. Eisenberg (Eds.), Behavioral Science In Pediatric Medicine Philadelphia: Saunders, 1971.

Feingold, Benjamin F., *Why your child is hyperactive*. New York: Random House, 1975.

Forehand, R., Sturgis, W., McMahon, R., Aguar, D., Green, K., Wells, K., Breiner, J. Parent behavioral training to modify child noncompliance: Treatment generalization across time and from home to school. *Behavior Modification*, 3: 3-25, 1979.

Forehand, R., & McMahon, R.J.. *Helping the noncompliant child: A clinician's guide to parent training.* New York: Guilford, 1981.

Friedman, Ronald J. & Doyal, Guy T. *The Hyperactive Child.* The Interstate Printers & Publishers, Inc. Danville, Illinois 61832-0594. 1982.

Gadow, K.D. Drug therapy for hyperactivity: Treatment procedures in natural settings. In K.D. Gadow & J. Loney (Eds.)., *Psychosocial aspects of drug treatment for hyperactivity*. Boulder, CO: Westview Press, 1981.

Gadow, K.D. Effects of stimulalnt drugs on academic performance in hyperactive and leaning disabled children. *Journal of Learning Disabilities.* 16: 290-299, 1983.

Gadow, Kenneth D. *Children on Medication, Volume 1: Hyperactivity, Leraning Disabilities and Mental Retardation.* San Diego, California: College-Hill Press, 1986.

Gittelman, R., Abikoff, H., Pollack, E., Klein, D.F., Katz, S., & Mattes, J. A controlled trial of behavior modification and methylphenidate in hyperactive children. In C.K. Whalen & B. Henker (Eds.)., *Hyperactive Children: The Social Ecology of Identification and Treatment.* New York: Academic Press, 1980.

Gittleman, R. *Hyperkinetic syndrome: Treatment issues and prinicples.* In M. Rutter (Ed.), *Developmental Neuro-psychiatry. New York: Guilford, 1983.*

Glynn, E. L., and J. D. Thomas. Effect of cueing on self-control of classroom behavior, *Journal of Applied Behavior Analysis*. vol 7.

Goldman, J. A., Lerman, R.H., Contois, J. H., & Udall, J.N.: Behavioral effects of sucrose on preschool children, *Journal of Abnormal Child Psychology.* 14: 565-578, 1986.

Goldman-Fristoe-Woodcock Auditory Skills Test Battery, *Technical Manual*. Minnesota: American Guidance Service, 1974.

Goyette, C.H., Conners, C.K., Ulrich, R.F. Normative data on revised Conners' parent and teacher rating scales. *Journal of Abnormal Child Psychology*. 6 (2), 221-236. 1978.

Goyer, P.F., Davis, G.C., & Rapoport, J.L. Abuse of prescribed simulant medication by a 13 year old hyperactive boy. *Journal of the Academy of Child Psychiatry.* 18: 170-175, 1979.

Greenwood, Charles R., Walker, Hill M., Todd, Nancy M., Hops, Hyman. *Preschool Teacher's Assessments of Social Interaction: Predictive Success and Normative Data.* Report No. 26, Center at Oregon for Research in the Behavioral Educaton of the Handicapped (CORBEH), University of Oregon, Eugene, Oregon, 1976.

Hartsough, C.S., Lambert, N.M. Some environmental and familial correlates and antecedents hyperactivity. *American Journal of Orthopsychiatry*. 52 (2): 272-287, 1982.

Haslam, RH.A., Dalby, J.T. and Rademaher, A. Effects of megavitamin therapy on children with attention deficit disorders. *Pediatrics,* 74: 103-111, 1984.

Haslam, Robert H.A. and Valletuti, Peter J. *Medical Problems in the Classroom: The Teacher Role in Diagnosis and Management.* Austin, Texas: Pro-ed, 1985.

Hawkins, N. *Maxims and Instructions for the Boiler Room*. New York: Theo. Undel & Co., Publishers, 1897.

Humphrey, J.H., and White, R.G., *Immunology for Students of Medicine,* 3rd ed., Blackwell, London, 1970.

Ingersoll, Barbara. *Your Hyperactive Child: A Parents Guide to Coping with Attention Deficit Disorder*. New York: Doubleday, 1988.

Johnson, S.M. and Bolstad, O.D. Mehodological issues in natrualistic observation: Some problems and solutions for field research. In L.A. Hamerlynck, L.G. Handy and E.J. Mask (Eds.) *Behavior Change: Methodology, Concepts and Practices*. Champaign, Illinois: Research Press, 1973.

Jones, R.R., Reid, J.B., and Patterson, G.R., "Natualistic Observation in Clinical Assessment", McReynold P. (Ed.) *Advances in Psychological Assessment*. Vol. 3, San Francisco: Jossey-Bass, Inc., p.42-95, 1975.

Jordon, Dale R. *Attention Deficit Disorder: Add Syndrome*. Austin, Texas: Pro-ed, 1988.

Kaufman, A.S. Factor analysis of hte WISC-R at 11 age levels between 6 1/2 and 16 1/2 years. *Journal of Consulting Clinical Psychology*. 43, 135-147, 1975.

Kaufman, A.S. *Intelligent Testing with the WISC-R*. New York: John Wiley and Sons, 1979.

Kaufman, A.S. The WISC-R and learning disabilities assessment: State of the art. *Journal of Learing Disabilities*. 14, 520-526, 1981.

Kavale, K. The efficiency of stimulant drug treatment for hyperactivity: A meta-analysis. *Journal of LearningDisabilities*. 15: 280-289, 1982.

Kendall, P.D., & Wilcox, L.E. Self-control in children: Development of a rating scale. *Journal of Consulting and Clinical Psychology*. 47: 1020-1029, 1979.

Kendall, Philip C. Padewer, Wendy. Zupman, Brian and Braswell, Lauren. *Developing self-control in children: The Manual*. Merion Station, PA, published by Philip Kendall, 1989.

Keogh, B.K., & Barkett, C.J. An educational analysis of hyperactive children's achievement problems. In C. K. Whalen & B. Henker (Eds.), *Hyperactive children*. New York: Academic Press, Inc. 259-282, 1980.

Kirk, Samuel A. *Educating Exceptional Children.* Boston: Houghton-Mifflin Co., 1962.

Landman, Gary B. & McCrindle, Brian. Pediatric Management of non-pervasively "hyperactive" children. *Clinical Pediatrics*. Vol. 25 (12) 600-604, 1986.

Levine, Melvin. *Developmental Variation and Learning Disorders*. Cambridge: Educators Publishing Service, Inc., 1987.

Levine, Melvin, *The ANSER System*. Educators Publishing System, 75 Moulton Street, Cambridge, MA 02238, 1989.

Loney, Jan (ed). The Young Hyperactive Child: Answers to Questions About Diagnosis, Prognosis, and Treatment. *Journal of Children in Contemporary Society*, vol. 19, 1986.

Lutey, C.L. *Individual Intelligence Testing: A Manual and Source Book* (2nd ed.). Greeley, Colorado: C.L. Lutey Publishing, 1977.

Milich, R., & Pelham, W.E.: The effects of sugar ingestion on the classroom and playgroup behavior of attention deficit disordered boys. *Journal of Consulting & Clinical Psychology.* 54: 1-5, 1986.

Milich, R., Wolraich, M., and Lidgren, S. Sugar and Hyperactivity: A Critical Review of Empirical Findings." *Clinical Psychology Review*, 6: 493-499, 1986.

Morrison, J.R., & Stewart, M.A. A family study of the hyperactive child syndrome. *Biological Psychiatry*. 3: 189-195, 1971.

Morriss, Richard. *Children with Attention Disorders: A Descriptive Guide for Parents and Teachers.* Monterey, California, Village Press, 1989.

Nichamen, Samuel J. and Wendel, James. *Coping With Your Inattentive Child*. Waterford, MI: Minerva Press, 1985.

Nicholson, Charles L. and Alcorn, Charles L. *Educational Applications of the WISC-R: A Handbook of Interpretive Strategies and Remedial Recommendations*, Western Psychological Services: Los Angeles, 1981.

Parker, Harvey C. *The ADD Hyperactivity Workbook for Parents, Teachers, and Kids.* Plantation, Florida: Impact Publication, Inc., 1988.

Patterson, Gerald. R. The aggressive child: Victim and architect of a coercive system. In E.J. Mash, L.A. Hamerlynck, & L.C. Handy (Eds.), *Behavior Modification and Families*. New York: Brunner/Mazel, 1976.

Patterson, Gerlad R. *Coercive family process*. Eugene, OR: Castalia, 1982.

Pelham, W.E., & Murphy, H.A. Behavioral and pharmacological treatment of attention deficit and conduct disorders. In M. Hersen (Ed.), *Pharmacological and Behavioral Treatment: An Integrative Approach*, New York: John Wiley and Sons, 1986.

Pelham, W.E. The effects of stimulant drugs on learning and achievement in hyperactive and learning-disabled children. In J.K. Torgeson & B. Wong (Eds.), *Psychological and Educational Perspectives on Learning Disabilities* (p. 259-296). New York: Academic Press, 1986.

Pelham, William E. What do we know about the use and effects of CNS stimulants in the treatment of ADD in *The Young Hyperactive Child*, Jan Loney (editor)., New York: Haworth Press, 1987.

Prinz, R. J., Roberts, W.A., and Hantman, E. Dietary Correlates of Hyperactive Behavior in Children, *Journal of Consulting and Clinical Psychology*, Vol. 48: 760-769, 1980.

Quay, H.C., Peterson, D.R. *Manual for the Revised Behavior Problem Checklist*, Coral Gables: University of Miami, 1987.

Rapoport, J.L., Buschbaum, M., Weingartner, H., Zahn, T.P., & Ludlow, C. Dextroamphetamine: Cognitive and behavioral effects in normal and hyperactive boys and normal men. *Archives of General Psychiatry*. 37: 933-943, 1980.

Rapoport, J.L., Ferguson, H.B. Biological validation of the hyperkinetic syndrome. *Developmental Medicine and Child Neurology*. 23: 667-682, 1981.

Ross, D. M., & Ross, S.A. *Hyperactivity: Research Theory, and Action* (2nd. ed.). New York: Wiley. (C.S.), 1981.

Safer, R.P., & Allen, D.J *Hyperactive children: Diagnosis and Managment.* Baltimore: University Park Press, 1976.

Sandoval, J., Lambert, N.M., & Sassone, D. The identification and labeling of hyperactivity in children: An interactive model. In C.K. Whalen & B. Henker (Eds.), *Hyperactive children*. New York: Academic Press, Inc., 145-171, 1980.

Satterfield, J., Hoppe, C., Schell. A prospective study of delinquency in adolescent boys with attention deficit disorder and 88 normal adolescent boys. *American Journal of Psychiatry.* 139: 795-798, 1982.

Satterfield, J. H., Satterfield, B.T., Cantwell, D.P. Multimodality treatment: A two-year evaluation of 61 hyperactive boys. *Archives of General Psychiatry*. 37: 915-918, 1980.

Satterfield, J.H., Satterfield, B.T., Cantwell, D.P. Three year multimodality treatment study of 100 hyperactive boys. *Journal of Pediatrics,* 98: 650-655, 1981.

Silver, Larry. *The Misunderstood Child: A Handbook for Parents with Children with Learning Disabilities.* New York: McGraw Hill, 1985.

Silver, Larry. *Attention Deficit Disorder: What is it? How is it Treated.* International ACLD Conference Presentation, Las Vegas, Nevada. Cassette tape recorded by InfoMedix, 1988.

Speer, F. Multiple food allergy. *Ann. Allergy*, Vol. 34, p.71, 1975.

Sprague, R.L., & Werry, J.D. Psychotropic drugs and handicapped children. In L. Mann & D.A. Sabatino (Eds.), *The Second Review of Special Education* . Philadelphia: JSE Press, 1974.

Sutter, Emily. Bishop, Peter, and Batten, R.Ray. Psychometric screening for Attention Deficit Disorder in a clinical setting. *Journal of Psychoeducatonal Assessment,*. 3: 227-235, 1987.

Swanson, J.M., & Kinsbourne, M. The cognitive effects of stimulant drugs on hyperactive children. In G.A. Hale & M. Lewis (Eds.), *Attention and cognitive development*. New York: Plenum, 1979.

Trites, R.L., Tryphonas, H., and Ferguson, H.B. Diet treatment for hyperactive children with food allergies in *Treatment of Hyperactive and Learning Disordered Children* (R.M. Knights and D.J. Bakker, eds). University Park Press, Baltimore, 1980.

Ullman, Rina K; Sleator, Esther K; and Sprague, Robert L. *Manual for the ADD-H Comprehensive Teacher's Rating Scale (ACTeRS)* Illinois, Metri-Tech, Inc. 1988.

Varley, C.K. Effects of methylphenidate in adolescents with attention deficit disorder. *Journal of the American Academy of Child Psychiatry*. 22: 351-354, 1983.

Walker, Hill M. Walker *Problem Behavior Indentification Checklist Manual*. Western Psychological Association, 1970.

Walker, Hill M.; McConnell, Scott; Holmes, Deborah; Todis, Bonnie, Walker, Jackie; Golden , Nancy. *The Walker Social Skills Curriculum: ACCEPTS and ACCESS.* Austin, Texas: Pro-ed., 1989.

Weiss, Gabrielle. Controversial issues of the pharmacotherapy of the hyperactive child. *Canadian Journal of Psychiatry*. 26: 385-392, 1981.

Weiss, Gabrielle, Hechtman, L., & Perlman, T. Hyperactives as young adults: School, employer and self-rating scales obtained during ten-year followup evaluation. *American Journal of Orthopsychiatry*. 48:438-445, 1978.

Weiss, Gabrielle, Hechtman, L. Perlman, T., Hopkins, J., & Wener, A. Hyperactive children as young adults: A controlled prospective 10 year follow-up of the psychiatric status of 75 hyperactive children. *Archives of General Psychiatry*. 36: 675-681, 1979.

Weiss, Gabrielle. Hyperactivity. Overview and new directions. *Psychiatric Clinics of North America.* 8:737-753, 1985.

Weiss, G. and Hechtman, L. Hyperactivie Children Grown-Up. New York: The Guilford Press, 1986.

Wells, K.C., Conners, C.K., Imber, L., & Delameter, A. Use of single-subject methodology in clinical decision-making with a hyperactive child on the psychiatric inpatient unit. *Behavioral Assessment,* 3: 359-369, 1981.

Wells, Karen C. What do we know about the use and effects of behavior theories in the treatment of ADD? Jan Loney (ed) in *The Young Hyperactive Child: Answers to Questions About Diagnosis, Prognosis, and Treatment.* New York: Haworth Press, 1987.

Wender, Paul H. *The Hyperactive Child, Adolescent and Adult: Attention Deficit Disorder Through the Lifespan*. New York: Oxford University Press, 1987.

Whalen, C.L. Hyperactivity and psychostimulant treatment. In J. R. Lachenmeyer and M.S. Giss (Eds.) *Psychopathology in childhood*. New York: Gardner Press, 1982.

Williams, J. I. Cram, D. M., Tausig, F.T., and Webster, E. Relative effects of drugs and diet on hypeactive behaviors: An experimental study. *Pediatrics*, 61(6): 811, 1978.